



SPATIAL RE-CONFIGURATION OF BACKYARD DWELLING IN BRAM FISCHERVILLE

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A dissertation submitted to the School of Architecture and Planning at the University of the Witwatersrand, in the partial completion of the degree of the requirement of the degree of Bachelor of Science (Honours) in Urban and Regional Planning

DECLARATION

I declare that this research report is my own work. It is being submitted for the Degree of Bachelor of Science Honours in Urban and Regional Planning to the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to any other University.

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ABSTRACT

Informal housing such as backyard housing in South Africa is essential as it has managed to absorb the low income group of people who cannot enter the formal market. Backyard housing offers a place where people can access services, employment opportunities as well as help maintain livelihoods. The research aims to illustrate how backyard dwellers have used spatial reconfiguration a strategy that helps them adapt to their accommodation circumstances. The finding has revealed the relationship between socio-economic and spatial aspects of backyard housing. These aspects not only contribute to the development of backyard housing, but as a way to maintain livelihoods.

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1 INTRODUCTION

1.1 RESEARCH BACKGROUND

South African cities have been experiencing rapid population growth, through natural occurrences and in-migration from rural to urban areas as well as through immigration from neighbouring countries (SACN, 2016). Although secondary towns have also been experiencing urbanization, the current growth is within large metropolitan areas. People mainly move into these areas to search for economic opportunities and as Turok (2014) argues most of them perceive the city as a place to improve livelihoods and gain access to better services. An estimate of 78% of the South African population live in cities and towns, while only about 14% live in areas further than 20 kilometres away from a town or city (ibid).

With rapid population and urbanization growth occurring in many areas, the provision of affordable housing becomes necessary, as people who move into the city require a place to stay (Shapurjee, Le Roux and Coetzee, 2014). The city of Johannesburg, being the largest in the Gauteng province, has experienced a vast growth of informal housing with about 270 000 backyard dwellings in 2012 (ibid). UN-habitat (2016) argue that cities in developing countries such as those in South Africa often struggle to keep up with the growing

population and fall short of supplying adequate and affordable houses in suitable locations. It is particularly problematic when it comes to formal residential property and land markets; they can be slow to develop and especially slow to supply housing that will meet the needs of low-income groups (Turok and Borel-Saladin, 2015). As a result, people will be left with no option but to search for alternative accommodation.

The outcome of a lack of affordable housing from the private sector and the slow supply of subsidised housing from the government is the development and growth of informal housing (Financial and Fiscal Commission, 2013 and UN -Habitat 2016). In the city of Johannesburg, densification has manifested itself in both formal and informal ways. A development of housing in the form of estates is occurring on the edge of well-established formal suburbs such as Northriding and Midrand. However, significant increases in densities are in townships such as Diepsloot, Soweto and Alexandra.

1.2 PROBLEM STATEMENT

Access to housing is essential because it contributes to the well-being of individuals and households. According to Turok and Borel-Saladin (2015) housing offers a place for self-development, privacy, relaxation as well as social interaction. They also argue that a house can be a place where people can access infrastructure, social

services and be close to economic opportunities, depending on its location and levels of affordability. The development of backyard housing has given people in low-income groups the opportunity to access these aspects that contribute to the development of livelihoods without having to enter the formal system (Weakley, 2013).

Backyard housing exists like all other informal activities because it operates outside the state regulatory systems such as registration and payment for property and services, as well as maintaining environmental and building standards (Watson, 2009 Turok and Borel-Saladin, 2015). Backyard housing has managed to develop over time because backyard dwellers often rely on their own strategies to earn a living and maintain their livelihoods. One of the ways can be noted by how backyard dwellers change their yard space to accommodate backyard dwellers as well as to access the necessary services (Lategan and Cilliers, 2015 and Turok and Borel-Saladin, 2015). It has been argued that backyard housing is critical, as it responds to the inadequate supply of housing in many areas in South Africa and it provides accommodation to people who cannot afford to buy formal housing (Lemanski, 2009, Shapurjee et.al, 2014).

Various issues that need to be addressed with regards to informal housing in South Africa include overcrowding, inadequate access to

services, lack of privacy and tensions between the landlord and the tenants (Lategan, 2012). Yet there have been insufficient policies that deal with most of these issues associated with informal housing. Lemanski (2009) highlights that, the apartheid government and its policies ignored the backyard housing phenomenon, as it was considered to be a temporary option which would eventually diminish once RDP houses were made available. The Breaking New Ground (BNG) policy, drafted in 2004, introduced the promotion of alternative housing. It aims to promote "progressive informal settlement eradication" (Mzuzondi, 2014; 644). For example, it states that informal settlements should not be disregarded but rather in-situ upgrading should be implemented where suitable. DHS, (2004) and Lemanski, (2009) state that in order to respond appropriately to backyard housing, the department would require further information.

According to Lategan (2012), policy has taken an approach that is very insensitive, as it has largely neglected the human dimension in housing development and delivery, especially with regards to informal housing. Watson (2009) argues that policies and strategies have focused on formalization and regulation of the rental relations, which could deviate from the objective of helping poor backyard dwellers.

1.3 RESEARCH OBJECTIVE

Addressing backyard housing should go beyond trying to replace the informal with the formal (Shapurjee and Charlton, 2013). It is important to first understand this form of housing in order to find creative and appropriate ways to address what is required. Turok (2011) stipulates that backyard housing cannot be understood in isolation because it is a multifaceted phenomenon which is interrelated with aspects of the economy, social institutions and changes in the demographics as well the environment. Therefore, decisions around housing define how households place themselves in relation to their income and social relations (Turok, 2011). When making decisions around housing, one can no longer think of it as a structure but as a way of living.

In addition, critics argue that issues related to backyard housing that are often highlighted by the government and policy are around the how backyard housing puts pressure on existing infrastructure and the apparent lack of safety and sanitary conditions. However, backyard housing assists many people in South Africa, therefore to respond to the issues, policies should focus more on improving people's lives, rather than just formalizing their homes. This would require a deeper understanding of the backyard dwelling, within its context and unpack the complexities that people live under.

The research aims to demonstrate how backyard dwellers have used informal strategies to adapt to their housing circumstances. The research does so by illustrating how spaces are configured and changed not only to allow for the development of backyard housing but how dwellers also use spatial reconfiguration of their internal spaces. They do so to accommodate themselves as well as to engage in a diversity of activities (Turok and Borel-Saladin, 2015).

Ultimately this research aims to pick up critical elements that can be drawn from socio-spatial elements of backyard housing in order to improve the living conditions of backyard dwellers. For example, when coming up with policies of upgrading, they can be better contextualized to suit the needs of the dwellers, especially in RDP neighbourhoods.

1.4 RESEARCH QUESTION

How do backyard dwellers in Bram Fischerville reconfigure and manage their living spaces?

1.4.1 Research sub-questions

What are the household needs that drive the configuration of space?

- What are the ways in which they implement it?
- How is space shared and with whom is it shared with?

- What are the rules around reconfiguration of space?
- Who makes the rules and how are they managed?
- What makes it resilient?

1.5 RESEARCH METHODS

1.5.1 Case Study Method

This research was gathered by conducting a case study on an area named Bram Fischerville located in the south of Johannesburg. According to Yin (2003), a case study method is should be used when trying to study contextual conditions. It is useful because it is an in depth study that allows for direct observations, interactions with people and data collection in a natural setting to get a better understanding of a particular situation (Yin, 2004). Bram Fischerville has been chosen because it is an area which was previously built as an RDP settlement but has developed overtime and densified through the development of backyard dwelling (Todes et.al 2015). However, the focus of the study is not to look at the development of backyard dwelling over time, but how backyard dwellers make use of their domestic space and how backyard housing has managed to improve their quality of life. The case study method is also important as it contributes to the contextually based limited research (Lemanski, 2009) on backyard housing within RDP settlements.

Therefore, a case study of Bram Fischerville will not only contribute to the limited research in the area but will give insight on backyard houses in RDP settlements through a close perspective.

1.5.2 Qualitative approach

According to Philips (1998), case studies can be done through both qualitative and quantitative methods. For the purpose of this research, a qualitative method was used to gain a better understanding of backyard dwellers. Phillip (1998) describes it as a non-numeric approach to research. It is useful as a small scale intensive approach to research because it unpacks the underlying lives of people, experienced at different times and places.

A qualitative method is necessary for this research because it can draw on the everyday experiences of people's lives. Therefore, it captures the complexities of people in places that need to be explored (Philip 1998). It also illustrates people's perceptions as it represents different aspects from various people before concluding on a particular matter. According to Cresswell, (2009) there are numerous characteristics of a qualitative approach; firstly, the research is conducted in a natural setting, secondly the researcher gathers information themselves and thirdly, respondents can express themselves regarding the issues they are confronted with.

1.5.3 Data Collection

The interviews took place within Bram Fischerville at the participants' homes. The research began with a scoping of the area and three main different typologies were identified, these were; prefabricated corrugated iron dwellings, self-built corrugated iron dwelling and backrooms built from traditional material (brick and mortar). Once the typologies were concluded, participants were chosen according to their housing typologies in order to get a variety of backyard houses, sizes and building material and to see what difference housing types made.

Fourteen interviews were conducted, which were a mixture of both men and women. These took place during the week and on Saturdays. Through an observation, Saturday was the best day to go because majority of people were at home doing the laundry or relaxing outside. In the process, a questionnaire, which was divided into three sections was utilised with open-ended questions to allow the participants to express themselves. The questionnaire started with a section which gave the respondent's opportunity to introduce themselves and entailed: who they are, how long they have been living in the area and how they managed to acquire the backyard housing. It also included aspects around family sizes, the rent they pay and whom they share the yard with. Secondly, the questions were around their individual houses; the ability to accommodate

individuals or family members while being able to carry out their daily activities. Lastly, it was to understand their relationship with the people they share the yard space with; this is both the landlord and other tenants. The purpose was to gain an understanding of both the physical infrastructure they share such as ablutions, water and electricity as well as the social relationships such as the activities they engage in together.

An aspect that contributed to making it easier to conduct this research was the fact that I was helped by a family member who lives in Bram Fishersville and works for Statistics South Africa, therefore most people know him from conducting a lot of interviews in the area, thus he was able to take my friends and I, to people that lived near his house and I interviewed them to contribute to my research. However, most of the respondents came other parts of Bram Fischerville. The language barrier was also not a problem because many residents spoke a language I could understand (English, Sotho, Setswana and Sepedi). I was accompanied and assisted by my class mates Siphosethu Gwabeni, Pulane Mphatsoe, Lutho Hopa and my friend Kgomotso Matlawe. Although I hardly came across people who spoke either Xhosa or Zulu, when I did my classmates/friends helped with translating. However, most of the respondents allowed me to speak English and they replied in their own language.

1.5.4 Cognitive Mapping

In order to engage with backyard dwellers, cognitive mapping was used as a tool to spatialize people's understanding of how they used their space. Cognitive mapping is described as a useful tool that emphasises on image and perceptions of spatial representation. It illustrates the subjective elements that determine urban space because different people interpret space in different ways (Walker, 2011). Basically, this was a drawing exercise that involved the dwellers in illustrating what they want to tell me about how they use their space. The drawing represented their social and domestic uses of space.

1.5.5 Limitations

The first challenge was the time that I went to conduct the interviews (during week days from 10 am to 2 pm). This was because many people were at work. Although I managed to get some people to interview, I went during the weekends when more people were available at home. The second aspect was that there were more corrugated iron dwellings than the brick and mortar backrooms. This meant that I had to walk longer than I had anticipated in order to get a variety of typologies.

Although walking in the area was not a major problem, getting people to take part in the interview was not as easy as I had

expected. This was due to the fact that, firstly, the backyard dwelling is usually located at the back of the main house, I was very unsure if I could enter the yard especially when the gate was closed, what made it easy to approach people was if they were outside. Secondly, the time that I went to conduct the research was during the municipal elections. This meant that there were a lot of people from different parties going to people's homes to convince them to vote. Considering the fact that election time is a very sensitive matter to a lot of people in the country, especially to those who feel the government has not delivered what they have promised to them together with the fact that my research was about backyard housing, many people thought I work for the government and were sceptical about taking part in the research.

1.5.6 Ethical Considerations

The research took place during the municipal election. It was important as a researcher not to raise expectations on my contribution to areas development. I had to be clear to the respondents that their involvement was their way of assisting me in conducting research for academic purposes.

The research was conducted at a communal and household scale. This means that people's home had to be respected and needed their consent before entering their homes and conducting the research. I

also could not force people who could not reveal information such as rent and the relationship between them and their landlord.

1.6 REPORT STRUCTURE

Introduction

This chapter introduces the research by giving a background and the context of which the research is based on. It gives the methods that have used to collect data.

Literature and Conceptual framework

The chapter gives an understanding of backyard housing in South Africa, the history and the current trends. It then presents the main literature and concepts used to analyse the findings of the research.

Case study

This chapter contextualises the case study of Bram Fischerville where the research has been based on.

Findings

The chapter presents an overview the findings of the research and illustrates the two scales of backyard housing; communal and household and the relationship between space and socio Oeconomic aspects.

Analysis

This chapter draws the literature and concepts used in the research that come out of the findings. It is presented according to the various concepts.

Conclusion and recommendations

This chapter outlines the critical elements that come from the findings as well as the literature to discuss a way forward on how to view backyard housing.

2 CONTEXTUALISING BACKYARD DWELLING IN SOUTH AFRICA

2.1 INTRODUCTION

This chapter discusses backyard housing within the context of South African cities. It first gives an overview of the underlying issues that contribute to the growth and development of informal housing; these are mainly attributed to urbanisation and population growth within urban areas, especially in major cities. Many people move to urban areas in search for better access to services and economic

opportunities and as result, need access to affordable accommodation in suitable locations (Lemanski, 2009, Turok, Shapurjee and Charlton, 2013 and Financial and Fiscal Commission, 2013).

The aim of the chapter is to also give an overview on how backyard dwelling has increased over the years as a form of low rise densification in urban areas. It illustrates that that with the increasing housing demands in the country, backyard housing has also contributed to low income households as an affordable form of accommodation located near economic opportunities and services (Financial and Fiscal Commission, 2013). Therefore backyard housing is a growing housing phenomenon that has not only benefited many people by improving their livelihoods but it needs to be understood to mitigate some of the issues associated with it.

2.2 BACKGROUND: URBANISATION IN SOUTH AFRICAN CITIES

Cities all over the world are experiencing rapid growth through natural growth and urbanization; where many people are moving out of rural areas and into urban areas as well as migrating from other countries. The UN-Habitat (2016) highlights that the world population has increased by 54% from 1994 to 2014. According to

the SACN (2016), more people are now residing in urban areas. Within the African continent, major towns and cities are rapidly increasing making Africa one of the fastest-growing continents, with an annual population growth rate of 2.88% (SACN, 2016).

In South Africa, former apartheid laws have played a significant role in contributing to the trends of urbanization. Firstly, as Turok (2012) highlights, since the 1980's, laws that restricted black migrants from moving and residing in cities had proved to be difficult to enforce, therefore many people started moving into urban areas in search for work opportunities. Secondly, apartheid law of racial segregation, left the development of different areas fragmented, as there is an unequal distribution of resources such as access to employment, infrastructure and amenities as well as public services. These have led to a majority of people leaving rural areas in hopes of finding work and accessing better services (Turok, 2012).

People that often migrate to urban areas in South Africa move into metropolitan areas (Turok, 2012). An example of this is the City of Johannesburg located in the Gauteng province (Shapurjee et.al 2014). What motivates people to move to Johannesburg is because it serves as the primary physical agglomeration of economic activity in the country (Turok, 2012). As a result, more people are inclined to move there because they hope to find work and live in the area. The other

reasons that people may choose to migrate to metropolitan areas is that they are equipped with better financial services, institutions and health services as well as bulk infrastructure, transport services and perceived economic opportunities (Ibid). These services are not often found in smaller towns and urban areas in the periphery of major cities at the quality and quantity of those in metropolitan areas.

However, although many people may move into major cities, the majority of the urban population growth has occurred within former black townships located at the periphery of cities. The main reason is because people from rural areas and those who migrate from neighbouring countries first reside in these sites. They offer affordable accommodation and transport services. Bram Fischerville is an example of this because many people move there for residential purpose and enjoy the services within and around the area (Todes et.al, 2015).

The increase of the population through urbanization trends comes with various challenges. One significant issue is the need for housing. People who move to look for better services and economic opportunities need a place to stay in order to access what they need and improve their livelihoods (Shapurjee, et.al, 2014). According to the UN-Habitat (2016) because of the rapid growth of the population,

many cities often fall short of supplying housing. Another problem is that there's is a lack of affordable housing, especially from the private sector, as a result people often have to resort to alternative forms of accommodation which has led to the development and growth of informal housing. According to the UN-Habitat (2016) about 881 million people live in informal settlements, which is a huge increase as compared to 712 million people in the year 2000. In South Africa, urbanisation has been a significant phenomenon contributing the development of informal housing (Muzondi, 2014).

2.3 DENSIFICATION OF URBAN AREAS

Density is simply described as a number of units within a given space (Boyko and Cooper, 2011). Turok (2011) highlights that, it has two elements; firstly physical density, which is an increase in the physical structure within a given area and secondly, occupational density, which in the increase of the actual population within a particular area.

The main objectives in pursuing and planning for densification are related to physical, social, environmental and economic aspects of a city (Churchman, 1999). The physical aspects of densification are about intensifying development. This means increasing the number of households dwelling to meet the housing demand within urban areas. A hierarchy of typologies are also developed to provide a

variety of residential choices. Social factors related to densification are not only to provide a variety of housing options, but are about integrating a diverse population. Furthermore, it is also concerned with the liveability of the area, ensuring that people live in comfort with a relatively well-managed urban environment (Churchman, 1999). The objectives of densification with regard to environmental factors is about ensuring development occurs without affecting the natural environment. It is about improving the quality of air by reducing private car dependency and encouraging public transport and pedestrian movement. Intensifying development in urban areas also helps with protecting green open spaces and other natural environments. Higher densities related to economic aspects are about utilising the densified population to support local business as well as using infrastructure in a more efficient manner (Churchman, 1999).

Both physical and occupational densities are relevant to this research because backyard housing can result in both increases. Lategan and Cilliers (2015) highlight that, the growth of backyard housing has introduced spatial arrangements through infill development. This definition can be considered physical densification because backyard structures have increased the number of existing housing structures in a given area. Furthermore, it has also increased occupational density, because more people are living and sharing facilities and

social amenities within a specific area. This growth has provided a quick form of densification because it increased informal occupation of informal dwellers. Lategan and Cilliers (2015) argues that, if informal backyard dwelling increases residential densities together with the growth and improvement of infrastructure capacity, they can provide a suitable number of people that would sufficiently use services and supports other aspects such as economic activities and transport infrastructure in an area. On the other hand, a drastic increase in the number of backyard housing densities would put extra pressure and damage the existing infrastructure capacity. Therefore, with careful planning and management, density can become essential to cities by improving housing choices, access to employment and public amenities (Turok, 2011).

2.4 BACKYARD HOUSING

2.4.1 History and evolution of backyard housing

Backyard housing is a form of densification that has long existed in South Africa. During the apartheid era, laws prevented migrants from permanently residing in cities (Crankshaw et.al, 2000). Those who were allowed to live in the city, were migrants who received permits for working and, residing in accommodation provided by the apartheid government (Turok and Borel-Saladin, 2015) such as hostels and official housing. Apartheid policies limited the rest of the

black population from accessing housing in the city and were forced to live in urban areas located the periphery of cities or in informal accommodation.

From the end of the 1960's, the apartheid government stopped providing housing and the new arrivals to the city had to find alternative accommodation. During the end of the 1970s and the early 1980's the government firmly prevented land invasions and backyard housing became a prominent housing option (Crankshaw et.al, 2000). It was during this time that the apartheid government turned a blind eye to backyard housing. By the end of the 1980s, the government lost control over townships and land invasion became very familiar. Therefore, the number of people living in informal housing and backyard houses increased (Crankshaw et.al, 2000).

Towards the end of apartheid and the relaxation on influx control legislation, many migrants moved into the city to search for work opportunities, as a consequence populations and urbanisation increased resulting in the growth of informal housing (Turok and Borel-Saladin, 2015).

2.4.2 Current trends

Years of urbanization and population growth has brought an increase to the demand of housing in many parts of South Africa. According to the Financial and Fiscal Commission (2013), the demand for housing

has increased in South Africa with an estimate of 12.5 million people needing accommodation. As a response to a lack of supply of affordable housing, many people live in informal housing such as informal settlements, backyard dwelling as well as subletting of buildings in the city centre. The growth of informal housing is due to the lack of housing delivery of affordable housing at the level of which it is needed and in areas close proximity to economic activity. Informal housing offers affordable rental option for the majority. The Financial and Fiscal Commission (2013) indicate that rental housing in South Africa constitutes about one fifth of all housing in the country. Therefore housing such as backyard houses offer one of the cheapest form of rental housing (Lategan and Cilliers, 2015).

Lemanski (2009) argues that backyard housing was not always given full recognition and was thought to be a temporary housing solution that would eventually go away. However their development has increased over the years for example, Turok and Borel-Saladin (2015) states that they make up a large percentage of housing, where about 40% of the rise in backyard dwelling was in Gauteng 2001 to 2011 in South Africa. Within Johannesburg, an increase in backyard housing and informal settlements has occurred in various parts of the city such as Soweto, Diepsloot, Alexandra and Ivory Park. Table 1 indicates that the development of backyard housing is outstripping the growth of informal settlements. Although informal settlements

have increased in areas such as Diepsloot, the overall percentage in backyard housing illustrates that it is a growing phenomenon.

Backyard housing has become an important housing option in South African for the majority of people who cannot afford to enter the formal housing market. It is located in areas where people can access services while being able to better their quality of lives. It is necessary to understand the backyard housing phenomena and the various socio-economic aspects of housing. Turok and Borel-Saladin (2015), states that there has been minimal systematic analysis done on backyard housing. They stipulate that, there is very little knowledge on the various functions executed by backyard housing in the urban system. Therefore, a reasonable understanding of backyard housing is critical in order to respond appropriately.

Table 1: Percentage growth of backyard dwelling and informal settlements from 2001 to 2011 (Quantec, 2013).

2001		Percentage Growth		Percentage Growth
	Backyard Dwelling	(1996- 2001)	Informal settlements	(1996- 2001)
Johannesburg	78572	35,54%	133400	39,72%
Soweto	40152	20,39%	24188	5,62%
Diepsloot	6050	690,85%	9648	158,24%

Alexandra	7694	-23,41%	10622	40,50%
Ivory Park	9422	154,79%	13162	17,65%
2011		Percentage Growth		Percentage Growth
	Backyard Dwelling	(2001 - 2011)	Informal Settlements	(2001-2011)
Johannesburg	123977	57,79%	125788	-5,71%
Soweto	36833	-8,27%	15148	-37,37%
Diepsloot	20494	238,74%	20051	107,83%
Alexandra	5747	-25,31%	9622	-9,41%
Ivory Park	15816	67,86%	8014	-39,11%

2.4.3 Defining backyard housing

Backyard dwelling is the co-habitation of the landlord and tenant on the same plot, mostly in separate dwellings and it offers affordable accommodation for dwellers that may not be able to afford to buy a house (Shapurjee and Charlton, 2013). Sometimes backyard dwelling can be used for as an extra space to accommodate the growing or extended family that may not be able to afford to buy a separate house (Shapurjee and Charlton, 2013).

The reasons that people live in backyard housing are crucial to creating and improving their livelihoods. Lemanski (2009), Turok and Borel-Saladin, (2015) and Shapurjee and Charlton (2013), highlight that people live backyards because of their location, access to services as well as gaining some security of tenure. The location is specifically related to an area that has sufficient infrastructure and public transport and is in reasonable proximity to work opportunities.

Backyard houses exist in different typologies, which may affect their size and their access to services. Firstly, the formally constructed backyard rooms; these are built as a separate structure to the main house and may typically be found as outside buildings (an extension of the main house), garages and backyard room. This kind of typology of backyard dwelling is found in urban residential areas and subsidized housing environments (Carey, 2012). Tenants also construct backyard houses by using corrugated iron or they buy prefabricated dwellings (Shapurjee and Charlton, 2013).

Despite the negative connotations against the RDP houses; about their location, size and poor construction, they have provided a new location for the development of backyard houses (Lemanski, 2009). Backyard dwelling has become a mechanism that allows densification in RDP housing residential areas, as these are usually low-density residents that cause urban sprawl (Shapurjee and

Charlton, 2013). These increased densities make efficient use of the spaces close to workplaces and require expansion and maintenance of social and hard infrastructure.

2.5 TOWARDS A CONCEPTUAL FRAMEWORK

2.5.1 Background of Resilience

There have been various interpretations of resilience in literature and across different disciplines; from an environmental, social to a spatial perspective (Pike et al. 2010). However, the 1960's was a prominent time where resilience was used in the field of ecology (Davoudi et al. 2012). Over the years, the use of the concept changed and was predominantly used in policy. Turok (2014) states that it was used to associate the resilience of a city or an area with its ability to recover from environmental disasters. Cities would be able to improve by developing new infrastructure and institutions that allowed it to function the way it used to.

Different disciplines used the concept in various ways to illustrate how a certain system would recover from disturbances. In ecology, the earliest use of the concept, resilience simply refers to the ability an ecosystem has to recover from environmental stresses such as fire disasters and climate change (Kirmayer et al. 2009). What is important for ecological resilience is the ability for a natural system to respond to the challenges or stress it is faced with, the capacity it

has, to go through self-regulation and to ensure processes of growth. Kirmayer et al. (2009) state that there are three mechanisms in which an ecosystem illustrates its resilience. Firstly, it protects itself from disturbances as much as it can. Secondly, it organises itself in a way that will maintain essential functions of the system, and thirdly it learns to adapt to different situations of the environment. However, they argue that ecological recovery does not necessarily mean returning precisely to its previous state, but into a newly reformed configuration that will suit the various plants and animals in the environment. Therefore, ecological resilience involves the transformation of a system to a better form with new strengths (Kirmayer et al. 2009).

The early use of resilience in psychology focused on understanding individuals and their ability to be resilient to external forces throughout their transitions in life (Pike et al. 2010). This means that people were able to transform into a better version of themselves after experiencing hardship and stress in their lives. However, Kirmayer et al. (2009) argues that researchers have critiqued the focus on an individual. Their argument was that individuals are part of a bigger social and cultural system. Within society, people are aware of their strengths, and it is a place where development takes place.

2.5.2 Defining Resilience; equilibrist to transformative and adaptive approach to resilience

As mentioned earlier, resilience has been used to illustrate the way in which systems recover. It can simply be described as a system's capacity to counter threat, overcome change and adjust to continuous pressures (Turok, 2014). The first notion of resilience is engineering resilience, which concentrates on the ability of a system to “bounce back”. This concept of resilience is as an equilibrist form of resilience. The focus is on how fast it can return to a stable and pre-existing form (Davoudi et al. 2012). What is important is the time it takes to turn back, the way it can predict change and also stay constant. Davoudi et al. (2012) argue that, although this kind of resilience has positive implications such as the ability for a system to withstand shock and preserve itself, it also has various limitations. These are mainly that a system may be stuck in a particular pattern and arrangement that may decay its condition and become weak (Turok, 2014). For example, the infrastructure of a city built to have engineering resilience may not fit a particular purpose over time this may result in it requiring more maintenance in the future. In other words, Turok (2014) argues that recovery is not enough for many systems to thrive, especially in a changing environment.

The limitation of engineering resilience to focus on bouncing back to normality is critiqued not to be fitting for most systems such as social

and urban systems because they are complex and not easily calculated. Evolutionary resilience is then brought forward as a much broader view of resilience because it is more concerned with progressive change over time. Davoudi et al. (2012) argue that evolutionary resilience is not about returning to a pre-existing form, but for complex socio-ecological systems to change, adapt, respond and overcome harsh conditions. This thinking of resilience has emerged as a concept that views the adaptation of cities. For example, Turok (2014) highlights that; progressive change within a city can be associated with stronger leadership, by strengthening decision-making and accountability. It is also a way of encouraging different forms of learning and building consensus amongst diverse interests.

Evolutionary resilience is important because it acknowledges the different ways in which a system can transform into a better form but still taking into consideration the various complexities it may face. Urban systems are complex. They do not occur in direct dynamics but are made up of different interacting components (Weakley, 2013). One cannot view resilience as a single process, where systems gain a great quantity of strengths which lead directly to good progressive results. Instead, it involves various interactions within multiple process and strategies that give rise to alternate courses of development (Kirmayer et al. 2009). With backyard housing, the

process of resilience is gained through multiple strengths and resources that people have access to and be able to change to overcome challenges. This involves livelihood strategies that people engage in, in order to earn a living, sustain their families and provide for their needs.

2.5.3 Adaptation as a Form of Resilience

The evolutionary and transformative approach to resilience is a central aspect used in this research. It is important because it rejects the notion normality and a single equilibrist form of resilience (Pike et al. 2010) and it is more concerned with the progress a system encompasses. Weakley, (2013) argues that this view of resilience is essential because it gives insights that explain what resilience is and how it is achieved; which is the capacity to adapt. Weakley, (2013) also brings together the concepts of informality and resilience. He recognises that informal settlements are important adaptive systems and very functional parts of the urban landscape and thus should be integrated into the larger context of urban areas and cities. It is with this adaptive capacity that informal settlements or individuals and households within informal settlements illustrate their resilience. Informal settlements show their adaptability to urban issues as they provide access to land and affordable accommodation to low income groups which provide a shelter to their family. They also bring people

closer to work opportunities, infrastructure, and social amenities (Weakley, 2013).

Pike et al. (2010) defines adaptation as the capacity of actors within a system that can influence resilience. According to Folke (2006), adaptation is also defined by the complex characteristics of self-organisation. The various dynamics that people engage in are dependent on their self-organising capacity of a complex adaptive system. Humans as actors are essential drivers of adaptability within a social system. Walker and Salt (2006) states that one should take note that the impact on resilience is affected by intentional and unintentional actions of individuals. Collectively, humans have the capacity to manage resilience; this means that it can intentionally determine their success of avoiding being in undesirable situations or their success of being able to bounce back into desirable systems (Walker and Salt 2006). Therefore, if people are able to transform to better standards of living, regardless of the challenges they face, then it is regarded as resilience (Canford, 2013)

Understanding adaptation as a social system brings back the point Lemanski (2009) made, that housing cannot be understood in isolation because it incorporates all complexities of society. People living in informal housing are able to shape the ways in which they can create desirable situations within a system that is considered

undesirable. Backyard housing itself does not conform to resilience alone but in conjunction with how individuals or households can use it to improve their living conditions. Adaptation is a critical perspective of resilience because it acknowledges the various ways in which households use reconfiguration to change their use of space to improve their quality of lives and to engage with stresses, risks and changes. This means that people living in backyard houses produce multifunctional domestic space that goes beyond their bounded spatial limitations and ensures that they able to engage in a variety of activities, which allows them to earn a living and overcome any accommodation challenges.

2.5.4 Communal Resilience

A sense of community is necessary because humans are social beings as they live in close proximity to each other and rely on the various aspects that individuals can contribute to the community. Kirmayer et al. (2009) argues that those who lack the connectedness often found in communal spaces feel isolated. They define a community as a group of people that are geographically bounded together; that share interests and concerns with similar or different identities but often has a high social integration. Sonn and Fisher, (1998) highlight that, those within a resilient community are provided with resources, opportunities and new way of dealing with challenges and live their everyday lives. Therefore, the concept of communal resilience is

important because it broadens the view of people and acknowledges the various complexities of social relationships.

Communal resilience can be achieved in different ways, but the two main approaches that are significant to people living in backyard housing is both through physical and social assets or resources that people have or can get access to. Adger (2000) refers to it as the accessibility to resources, and how people use them to contribute to their livelihoods. In backyard housing, people move into an area for physical assets such as accommodation, access to infrastructure and services (Lategan and Cilliers, 2015). They also gain social resources such as the social capital of the community. Social capital is the term used to describe social networks, trust and finances used to invest in the community's social relations (Rakodi and Lloyd-Jones, 2002 and, Kirmayer et al. 2009). These social networks are important mechanisms in which communities show their resilience. People often share strong links through different practices they engage in and the bonds they share.

2.6 SPATIAL CONFIGURATION

Space is an important aspect of housing design because it illustrates the cognitive and social processes of individuals and society. The way space is ordered within a house, is not because of the physical design but the way the space is transformed using other objects such as

furniture (Mzoori, 2014). Spatial configuration is defined as the process created through an interior arrangement and partitioning of space, and it is a major factor that contributes to the control of human activity (Thungsakul, 2001). Thus, spatial configuration is important because it is a process that changes buildings from just physical objects to social and cultural spaces (Mzoori, 2014).

The space within a building is a place where the relationship between the functional and social meaning of a building is formed (Mzoori, 2014). To understand this relationship, Saruwono et al. (2012) argues that the utilisation and purpose of space is assessed through two approaches; which are the anthropological and they are based on the meanings and beliefs that individuals or groups have. The behavioural aspect is associated with the attachments, understandings that people have in relation to their domestic space. Saruwono et al. (2012) highlights that, all spaces within a house are important because they are related to each other. Therefore, the behaviour of its users determines the arrangement of space within a house behavioural approach.

Thungsakul (2001) states that; the configuration approach is a way of gaining a deeper understanding of people's experience within a social system. The spatial relationships formed within a house or communal areas are a method of identifying the nature of a society

and the behaviour of its individuals because it reflects their way of thinking and living (Mzoori 2014,). Not only does space create spatial patterns, but it also forms relationships, cultural values and economic prospects (Giesecking et al. 2014)

The way that living or domestic space is arranged defines how people manipulate their space to accommodate and support their life choices. However, for people with very limited space, there is a temporal dimension to the way they use their space. For example, backyard houses are usually single or double rooms, they have limited space to go about their daily activities, so they deliberately change and reconfigure their homes to engage in multiple activities throughout the day.

2.7 CONCEPTUAL FRAMEWORK

Households define their spaces. This means they create meaning through interrelationships between social roles in relation to space. It is important to understand that those who live in backyard dwellings are not always there by choice of living in a small space, but often because of circumstances and can often create their own meaning of livelihoods. Alinovi et al. (2010) argues that the goals that people aspire are their livelihood outcomes. People often pursue livelihood strategies to gain increased incomes, reduce their vulnerability and improve their wellbeing. Therefore, livelihood

outcomes are essential in understanding people's resilience through their priorities, how they respond to new opportunities and challenges (Alinovi et al. 2010).

The ability of backyard housing to provide accommodation that enables households to create a livelihood can make it resilient. People are not able to overcome certain disturbances in life but they find multiple ways and strategies in order to earn a living, sustain their families and provide for their needs. Rakodi and Lloyed-Jones (2002) argue that families adopt household strategies as a way to cope with stress and as a diverse way of maintaining their capabilities.

Spatial configuration is a process and strategy that backyard dwellers use to adapt to their accommodation circumstances and daily challenges. It is a concept that illustrates the way they use and give meaning to the space they have. Flexibility and diversity, negotiability, social capital and economic sustainability are the concepts and strategies used understand how through spatial configuration backyard dwellers have adapted to their various living conditions and challenges. The aim is to illustrate the linkages between the social and spatial aspects of housing and livelihoods, through the material and social resources (Rakodi and Lloyed-Jones,

2002) and activities that people rely to improve their livelihoods and as a result show their resilience.

2.7.1 Flexibility and Diversity

Spatial configuration is illustrated through the physical flexibility of elements within a space. It is used to understand the ability of households and communities to rearrange space to accommodate various people and their needs. Within a yard, landlords reconfigure their backyard space to accommodate backyard dwelling. Spaces outside become flexible because they cater for people to build backyard dwelling as well as to cater for similar or varying needs which may compete over time (Turok and Borel-Saladin, 2015).

Flexibility of backyard housing is also defined by the ability to move in and out when opportunities or challenges arise. (Lemanski, 2009 and Turok and Borel-Saladin, 2015). People are not tied down by lease agreements and they can move when opportunities such as employment arise (Watson, 2009). As Adger (2000), highlighted social resilience is illustrated through the resources available to people and the ability to modify them. Landlords use the resources they already have to share with backyard dwellers such as water and electricity as well as access to toilets and bathing or washing area (Turok and Borel-Saladin, 2015). People also reconfigure space to engage in a diversity of activities. Households do not only use spaces

within a yard to accommodate backyard dwelling but to engage in activities they cannot within their houses such as washing their laundry and accessing services.

The flexibility of space is also illustrated through the reconfiguration of internal spaces. Households become flexible as a process of accommodating all family members. They use furniture and objects for partitioning their homes as a way of creating different spaces within a house that can be used in multiple ways. Therefore, people use the physical process of spatial reconfiguration to ensure that backyard housing serves a functional purpose. Households living in backyard dwelling do so to accommodate their family members as well as to engage in important activities on a daily basis (Lategan and Cilliers, 2015).

2.7.2 Negotiability

Mzoori (2014) argues that socio-cultural aspects are the underlying factors that define the use of space. While flexibility and diversity is illustrated through physical reconfiguration of space to accommodate for households and to engage in different activities, Individuals, households and landlords use negotiation of space to accommodate for various needs (Morange, 2002). Firstly, before people can build backyard housing, they often negotiate with the landlord, who comes up with the necessary rules and limits on how

backyard dwellers can use the space (Morange, 2002 and, Watson, 2009). This can be affected by the size of the space available, the size of the backyard house and the price they would have to pay. Secondly, negotiation of space continues when backyard dwellers share their backyard space. They may come up with rules and routines on how to use and maintain the space they share. The area outside is shared amongst backyard dwellers themselves as well as the landlord, therefore it becomes an area for children to play and for domestic needs like washing clothing as well as relaxing.

Cultural and social aspects are also the underlying factors affecting the form of the house. According Mzoori (2014) there are three main cultural aspects that define the configuration of internal space of a house, namely:

- Basic needs; these are sleeping, lounging, bathing and other activities. Mzoori (2014) highlights that the importance is the function of the activities and not just the activity itself and the extent to which they impact the organisation of space within a house.
- Being able to accommodate family and extended family members.
- Gender; the level of privacy within a house that is required to separate men and women as well as children and parents.

According to Thungsakul (2001) the use of walls, curtains and other elements to partition space is based on the perceived gender of the family, the activity that people engage in, the function of the space as well as the lifestyle choices. These factors are not only shown through the level of diversity within backyard houses but also how families negotiate spaces through socio-cultural aspects of households. For example, households may reconfigure the house to create a private space for parents as well as for the female or male members of the family. They can also create communal spaces for the family to eat together and relax.

2.7.3 Social Capital

Social capital is important because describes the level to which a community reinvest its physical, social, financial and human resources into social relations (Kirmayer et al. 2009). What is important is the social networks formed within the space in which backyard dwellers share through a variety of practices and emotional bonds. People rely on these networks because they can provide each other with material, informational and economic resources that do not only help with solving problems but also overcoming challenges. As a result, Kirmayer et.al 2009) argues that communities that show active social networks and support should be considered to have a significant level of resilience.

Social capital is necessary within backyard dwelling because Lategan and Cilliers (2015) argue that people living in low-income households do not regard their households as a financial asset but in socio-cultural terms. As a result, people living in backyard housing use existing provisions and relationships to improve their accommodation circumstances. They state that households often surpass the confines of inclusion and exclusion and they collaborate by using each other as resources. People who share space and services show their communal resilience, though the capacity to adapt, recover and endure challenges they may face.

2.7.4 Economic sustainability

People show their resilience through the ability to recover and overcome various challenges within their transitions in life (Kirmayer et al. 2013). One of the ways they do so is through their access to resources. Economic sustainability is illustrated through the economic resources that households have such as an income, in order to be sustain their livelihoods. Backyard dwelling is an affordable form of housing that has managed to absorb low income households in need of accommodation. The rental payments are often cheap and arranged and negotiated between tenants and landlords (Waston, 2009). It is beneficial to backyard dwellers because they rely on it, as they are not able to enter the formal housing market (Weakley, 2013).

Backyard housing does not only benefit the tenant but the landlords themselves. Lemanski (2009) highlights that with the significant level of poverty and unemployment of in RDP settlements; it is with no surprise that landlords or property owners may use their assets as a strategy to gain an income. However, Lemanski (2009) and Shapurjee and Charlton (2013) argue that landlords often rely on the additional income as a way to pay for their basic needs such as food, transport and services. This means that to some extent they rely on backyard dwellers as a survivalist strategy rather than as profit makers.

People living in backyard dwelling may also benefit from the locational aspects of the area in which they are located. As argued by Lemanski (2009) and Turok and Borel-Saladin (2015) people may choose to live in backyard housing because it is closer to employment. This means that transport may also be cheaper and people have more money to spend of other expenses. Therefore, economic sustainability is seen through as a form of resilience because both landlord and backyard dwellers use it to sustain improve their quality of lives.

3 CASE STUDY: CONTEXTUALIZING BRAM FISCHERVILLE

3.1 LOCATION

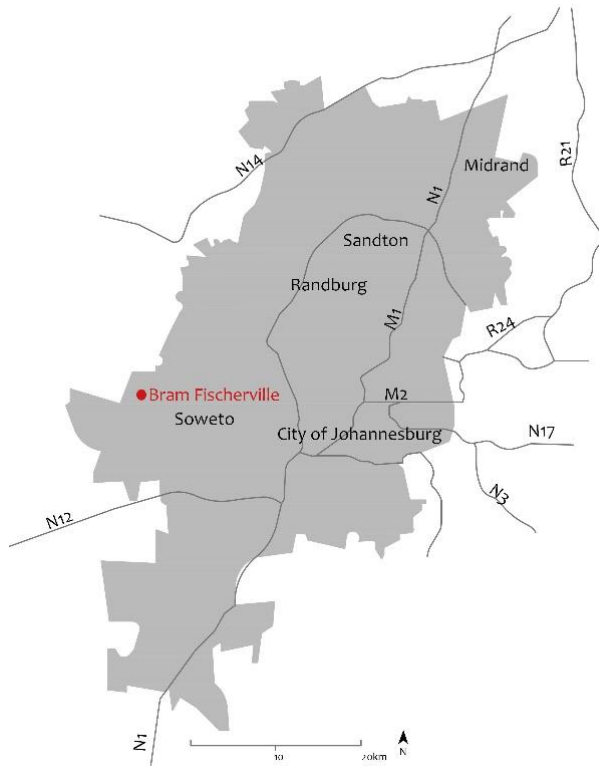


Figure 1: locality map of Bram Fisherville in Johannesburg. (Selepe, 2016).

Bram Fischerville is located near Soweto and is in close proximity to the Johannesburg CBD. Gardner cited in (Todes et.al, 2015) states that it is well located with good access to public transport such as the mini bus taxi and buses that go directly to Johannesburg CBD, as well access to services and urban infrastructure in Soweto. This results in increase of the population in Bram Fischerville as new residents seeking accommodation in a place near social and economic development have relocated there (Todes et.al, 2015).

3.2 HISTORY

Bram Fischerville is a residential area located in the south of Johannesburg (figure 1). The area was named after an Afrikaans attorney who represented Nelson Mandela (Todes et.al, 2015). After 1994, the area was one of the major Reconstruction Development Programme (RDP) housing areas in South Africa. Bram Fischerville was originally built for the occupation of residents that lived in overcrowded houses, backyard houses and informal settlements in Soweto as well as other residential areas within Johannesburg (Todes et.al, 2015).

Bram Fischerville was developed as an RDP area through various phases. Phase 1 was initiated and developed from 1997 till 1999. It was then followed by four more phases which were developed and occupied by the end of 2002. A development of bonded houses was

also initiated on the western edge of Bram Fischerville, and was fully developed by the end of 2010. (Todes et al. 2015).

3.3 URBAN FABRIC AND HOUSING TYPOLOGIES

Bram Fischerville like many other RDP settlements in South African is prone to an underdevelopment of infrastructure and services throughout the area. The existing public facilities such as parks and schools have been developed over time. However, due to an increase in population (figure 2) and densification, their quality has been diminishing (Todes et.al, 2015).

The RDP houses in the area are found in 3 different typologies; the single detached houses, the semi-detached that share a wall of their housing property and four houses in very close proximity to each other, with 2 in front and 2 at the back and are partitioned by walls (Todes et.al, 2015) (figure, 1.1).



Figure 1.1: RDP house in Bram Fischerville, (Selepe, 2016).

The change in the urban fabric of Bram Fischerville has been created by extensions, renovations as well as a complete change of the original RDP houses. Gardner in (Todes et.al, 2015) highlights that the change has also occurred through a development of boundary walls, extended living spaces as well as secondary structures. However many houses in the area still remain the same.

What has brought tremendous change to the urban fabric is the growth of backyard structures. In 2001 only a few houses had secondly dwellings because policy prevented the development of informal housing in RDP settlements (Todes, et.al, 2015). However in 2011, as revealed by the census data, backyard dwellings in Bram Fischerville grew by 305 % over the 10 years (2001 -2011). It is during this time that the population increased thus the number of people living in backyard housing increased.

They are mainly used as backyard dwelling for residential purposes. These are found in two main typologies; the formally constructed ones with brick material and the shacks built with corrugated iron (Todes et.al, 2015). Gardner also states that backyard houses have grown so much in the last 10 years, that there is one backyard structure in every four houses. However these vary from no backyard structure in a yard to multiple backyard structures in a single plot. Although they are mostly used for residential purposes,

some of the backyard structures are used as spaza shops (small tuck shops), hair salons and other businesses (Todes et.al, 2016).

Table 2: Population growth in Bram Fischerville (Todes et.al, 2015).

Area km2	Population		Density (people/km2)		Percentage increase
	2001	2011	2001	2011	2001-2011
13.2	19 827	91 403	1 504	6 933	361.00%

Table 3: Percentage growth of informal settlements and backyard dwelling in Bram Fischerville (Quantec, 2016).

	2001	2011	percentage growth 2001-2011
Informal Settlements	3145	272	-91.35%
Backyard Dwelling	260	8204	3055.38%

4 FINDINGS

4.1 INTRODUCTION

This chapter presents the key findings that have emerged from the interviews conducted in Bram Fishersville. As mentioned in section 3, the interviews included a drawing exercise, where the respondents were asked to give a visual description of they used their space. The interviews conducted started with questions to give an introduction of the backyard dwellers. These were to understand who they are, how long they had been living in Bram Fischerville and their particular backyard house, and the various reasons they came to Bram Fischerville and how they acquired the backyard rooms.

The findings are presented by firstly giving an introduction of the backyard dwellers and how they managed to obtain backyard housing. Secondly, they show external relationships and use of space. This is because there are multiple people/ households in the yard that share facilities such as; the physical infrastructure and services in the yard and social, cultural aspects such as sharing space on the outside for leisure purposes. The third section gives a narrative of individual households and how they have reconfigured their internal spaces. It is divided into the different typologies of backyard housing

and a selection of respondent's drawings to illustrate the relationships between people's everyday lives and space.

4.2 CONTEXTUALISING THE BACKYARD DWELLERS

The Backyard dwellers that were interviewed were a mixture of both men and women but most times women were the ones at home. A majority of the respondents came from outside Bram Fischerville and even outside Gauteng. For example, two women came from the Eastern Cape and another woman came from Mafikeng. Those who lived in the Gauteng province, moved from places such as Orlando, Mathole and other parts of Johannesburg.

Table 4: Summary of the respondents in Bram Fischerville.

respondent	origin	household size	dwelling type	size	rent
Thabo	Mathole	6	Shack	1.5 room	R 350
Namhla	Eastern Cape	4	Shack	2 room	R 400
Mapitsi	Bram Fischerville	4	Shack	1.5 room	R 350
Thandi	Bram Fischerville	3	Shack	1.5 room	R 350

Sethu	Eastern Cape	6	Shack	2 room	R 400
Tshepo	Molapo	3	Shack	2 room	R 400
Lerato	Tshepong	1	Room		R 700
Tshego	Meadowlands	2	Room		R 750
Nkosinathi	Zola	1	room		R 750
Refiloe	Vosloorus	2	garage		R 1 000
Palesa	Vosloorus	1	room		R 800
Xolelwa	Vosloorus	1	room		R 800

There are various reasons why people moved into Bram Fischerville.

The majority of people come into the area for residential purposes.

(Todes et al, 2015) Like many people that migrate to Johannesburg, a Xhosa woman who has been living in Bram Fischerville for four years moved from Eastern Cape because of the lack of development back at home, where she alluded that her children had to even walk far to get to school, so she came to Johannesburg in search for better opportunities. The other two young women had just completed their high school and came to Johannesburg in the hopes of getting a job and furthering their education. Those that already lived in Johannesburg needed to move out of their family's houses either because they had their own families or because they needed more space and privacy.

The respondents indicated that when they move into Bram Fischerville, they acquire backyard rooms in various ways. Firstly, the most common way is buying them from people who make prefabricated shacks with corrugated iron in various sizes and sells them at different prices (figure 2.1). After buying the shacks, people will then negotiate with the landlord on whether they could place their shacks in their yard, if there is space and how much rent they would have to pay. The other way of getting rooms is through advertised rooms on the walls of Shoprite (figure 2.2) or people referring each other to landlords who owns rooms and are ready to rent them out. Some landlords often build rooms in their backyards using traditional material (brick and mortar) as well as an outside toilet, this makes it easier for them to rent to people, as they own the backyard rooms themselves. Lastly, some respondents build the shacks themselves; but first, they buy material from other places (usually scraps of corrugated iron) and then negotiate with the landlord about using the space at the back to build their own shacks, and then pay monthly fee to continue renting the space.



Figure 2.1; Zozo shacks advertised in front of where they are made in Bram Fischerville. (Selepe, 2016).



Figure 2.2; Rooms advertised on a Shoprite wall at a complex in Bram Fischerville, (Selepe, 2016).

Together with the different sizes and prices of the backyard dwelling, there are a variety of people and households sizes living in the houses. From a single person who is in her late 20's to a nuclear family of six living together. More interestingly is the fact that the size of the house is not in direct correlation with the number of people living in the backyard house.

4.3 SPATIAL CONFIGURATION OF COMMUNAL SPACES

This section looks at the physical and socio-cultural aspects that the backyard dwellers share in their yard and that contribute to their daily routines and as a way of maintaining and improving their livelihoods. It illustrates how tenants and landlords use spatial configurations in the yard to make use of the space for the benefit of each household as well as the group. Backyard houses ranged from two dwellings in a yard to eleven dwellings. During the interviews, there was an indication that people shared the spaces outside for various activities as well as accessing infrastructure and services.

4.3.1 Communal spaces

The majority of the interviews were conducted within the yard but outside people's homes. Through this, an observation of the area was used as a way to see how different people and household utilise the space outside. The backyard houses in the area are mostly arranged in an L or U shape, this creates a communal space for the

backyard dwellings and the main RDP house for the tenants and landlord. It was clear that people used this space to engage in various activities as well as to relax together as different households.

The outside space was used as a place for doing some household chores. All of the respondents highlighted that they washed and hung up their laundry outside (figure 2.3). As indicated in the figure 2.8, the laundry line is located in the middle of the various dwellings, making it accessible to everyone. People would also wash outside because of the lack of space in their backyard dwelling as well as to access the outside tap.

In order for households not to clash and engage in their various activities harmoniously, tenants have devised routines. Rules came out of agreements and negotiation with each other, for example, one of the respondents who are renting with three other households in the yard, indicated that those who were not working during the week would do their laundry during the week when the other tenants were at work and those who were working would wash their clothes on the weekend. Most people also help each other out when it came to maintaining the spaces that they share. They come up with routines on cleaning communal space such as the toilet and the outside area.



Figure 2.3; A lady (tenant) washing her laundry outside near a tap (Selepe, 2016).

All the rules were verbally communicated amongst the dwellers and landlord. While most of the backyard dwellers indicated that they made up rules as they go, some respondents stated that their landlord would say they should maintain the space (by cleaning) and not to engage in activities that would disturb other people.

Not only did households use the space outside for domestic activities, but there was a strong indication that people often benefited from living together. During the interviews, most people said that they felt very welcomed when they first moved in their backyard housing. When being asked about the relationship between one another, I would get responses such as:

“I don’t feel like I am renting here, it feels like home.”

“We always help each other out; when someone leaves I can watch over their house and even stay with their child”

Most of the backyard dwellers used the space outside to relax, often times even with the landlord. It gave them a place where they can form relationships.



Figure 2.4; Men from different households sitting together outside their homes, and children playing in the space between backyard dwelling and RDP house (Selepe, 2016)

Some of the respondents were found sitting outside together, especially during the weekend. While some did their laundry, others were conversing or doing each other's hair. Children from different households also played together outside (Figure 2.4).

Three of the respondents lived together in a yard with prebuilt backrooms. The main house has also been turned into a renting place with additional rooms built on the outside as well as a garage used as a house. The people interviewed were three ladies, Refiloe, Palesa and Xolelwa (not their real names) in their late 20's. Refiloe lives with her 4 year old daughter in the garage and pays R1000 because she has a much bigger space, while Palesa and Xolelwa live in the built rooms and pay R800 for rent. Palesa and Refiloe have been staying in Bram Fischerville for 2 years and Xolelwa for 6 months however; she stated that the way she has been welcomed, she feels as though she has been staying longer than a few months.

The first thing Xolelwa said to me was "here we are a big family even the men here are always with us." The outside felt like an extra living room because it created a communal space for the tenants. The rooms have a built in porch (Figure 2.5), which acts as an outside

sitting area where they relax and sometimes eat together. For example, Xolelwa was busy eating and she said,

"I had just arrived from work; the food that I am eating comes from three houses, no one ever goes hungry here".

The three ladies indicated that they all benefited from living together because they could rely on each other. Sharing food, ideas and other social resources was also important in keeping the relationships they have formed in the space they share



Figure 2.5; the outside space shared by the three ladies and the porch they use for sitting together. (Selepe, 2016).

4.3.2 Sharing Services

When it came to sharing amenities in the yard, the main services were ablution facilities, water and electricity. Firstly, the toilet was usually located in two places; inside the main house for everyone to use or an outside for the tenants. Tenants that lived in zozo shacks mainly used inside toilets. This was because tenants have bought the dwellings by themselves and the landlord might not have planned toilets and other resources for them. For landlords that were able to plan ahead the ablution facilities were located outside and were mostly adjoining the prebuilt backrooms (figure 2.6).



Figure 2.6; outside toilets and taps for backyard dwellers to use. (Selepe, 2016).

Accessing ablution facilities that are inside the main house meant that there needs to be a way people can enter the house at any time.

This became problematic for one of the respondents and the people she shares the yard with. She said,

“Ever since the landlord moved in with his girlfriend, the house is not always open because the girlfriend fears that it is not safe to just keep the house open

Therefore, people have to resort to other toilets in other yards or have to wait for the landlord to open his house. For those located on the outside, they were always open or the tenants each had their own keys. Everyone in the yard also shares water and electricity. Water is readily available to tenants through an outside tap. Therefore, people can fetch water and keep the amount they need in buckets in their houses. The rent amount usually includes electricity; therefore, everyone has access to it. Electricity is accessible by extensions cords connected from the main house to the separate backyard dwellings. When asking questions around the general issues that people face with living in a backyard house, people mostly mentioned electricity. The issue arises from the fact that there is no real coordination with regards to the use of electricity by each household. Because they all pay to the main house, people cannot fully monitor the amount of electricity they use.

The one man who shares a yard with two other tenants said that, “Electricity is a problem because we just pay the rent and we cannot

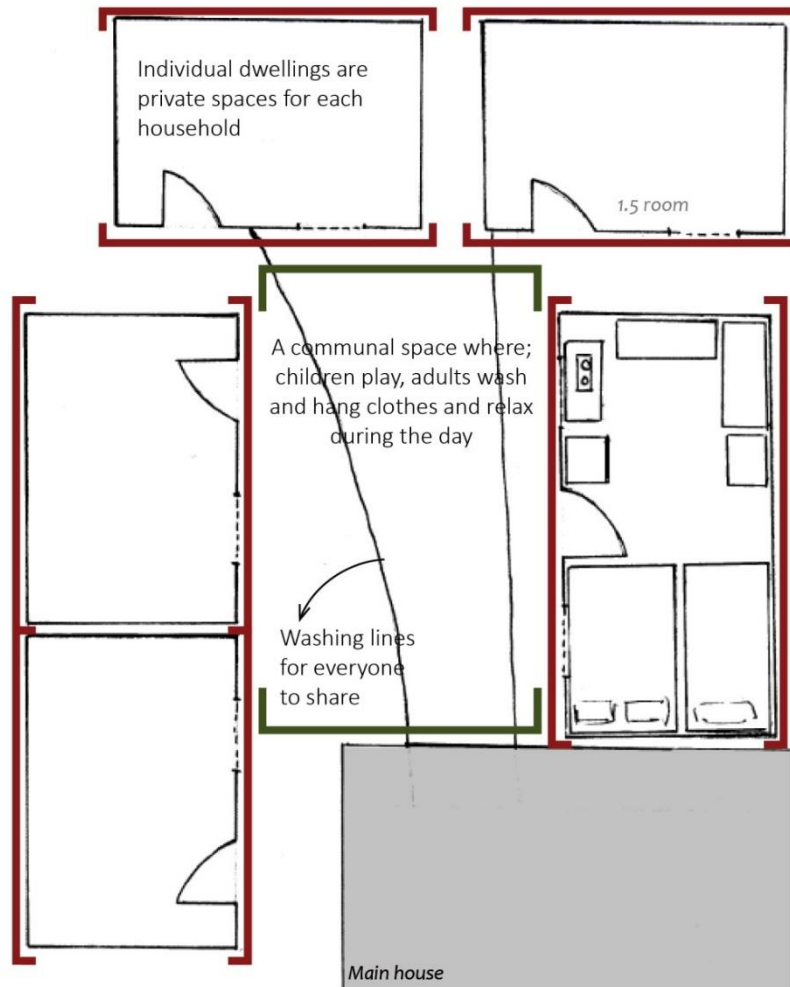
control it. So whenever it finishes, we just look at each other hoping that one of us will take some money out and buy extra electricity”.

Figure 2.8 illustrates the spatial configuration that has occurred in the backyard of RDP houses. Two yards are presented, where one is made up of zozo dwelling and the other is prebuilt rooms. The dwellings have created a communal space where they can access the necessary services as well as to engage with each other. People do their laundry in the middle space; children play and households relax together.

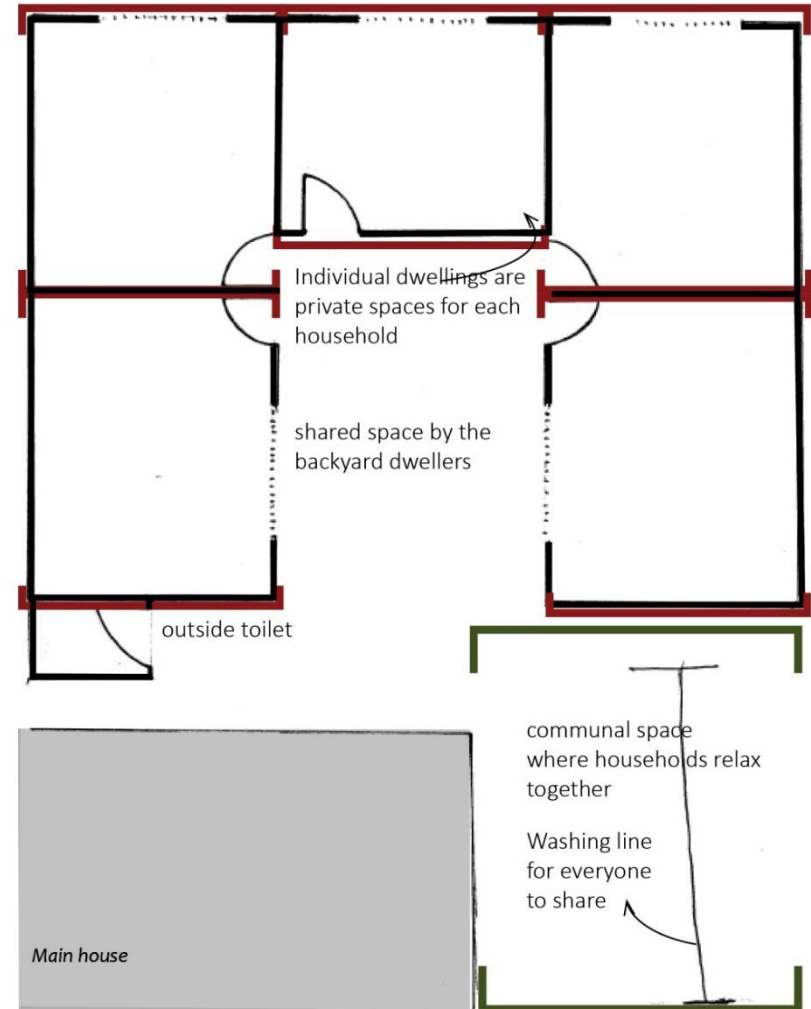


Figure 2.7; the outside space shared by backyard dwellers and landlords created through the L or U shape of the arrangement of backyard dwelling, (Selepe, 2016).

private spaces communal spaces



COMMUNAL SPACE IN THE BACKYARD



by Selepe (2016)

Figure 2.8: The two yard spaces of RDP house and backyard dwelling.

4.4 SPATIAL CONFIGURATION OF INTERNAL SPACES

This section represents various backyard housing typologies together with the narrative of the people who occupy them. The aim is to illustrate the socio-spatial aspects of backyard housing and show how people in their houses strategize to improve their quality of lives use spatial reconfiguration. (All the names in this section are not the real names of the respondents.)

4.4.1 BACKYARD TYPOLOGY 1

This section represents backyard housing built by people or bought from the zozo company. The backyard dwellings are mostly made from corrugated iron (figure 3.1).



Figure 3.1; Examples of the corrugated iron backyard dwelling in Bram Fischer village (Selepe, 2016).

4.4.1.1 Tenant profile 1

People who live in the 1.5 room dwelling are a nuclear family of six, which comprises of a father, mother and four children at the ages of 10, 7, 5 and 3 years. Thabo, who was interviewed, is the father of the house, who moved from Mathole and he has been living in Bram Fischer village for 7 years. He lived in that particular dwelling because his previous landlords asked him to move there and take care of an elderly man who lived in the RDP house. When he arrived there, he built his own shack to accommodate for his own family, and he has been living there ever since. Since the passing of the elderly man, the main house is now being used for rental purposes, so he therefore shares the yard with three more households.

4.4.1.2 Spatial reconfiguration

Thabo states that during the evening, they keep the dwelling as one open room, where the family sits together, watches TV from the chairs and bed as well as to eat dinner together. When everyone goes to sleep, the parents divide the room by closing the curtain. This way, the living/kitchen room reconfigures into a bedroom for the children, who use a sponge mattress to put on the floor and sleep on (figure 3.2).

The backyard house occupied by the family is a 1.5 room shack, which Thabo built it himself from scraps of corrugated iron. The furniture the family can fit in is; a double bed, a small wardrobe, a fridge, a table for television and a cooking area. The family uses the furniture to demarcate the various uses of the house visually. They also use a curtain to divide the dwelling into two rooms; the bedroom and the kitchen. The reason behind the utilisation of a curtain is to create separate rooms that would give the parents a sense of privacy.

Majority of the time the bedroom is always the same and mostly used by the parents. In the morning, while everyone is sleeping Thabo wakes up and bathes near the bed and then he leaves for work. Thus the bedroom becomes a space for both sleeping and bathing.

The kitchen experiences most of the spatial configuration. In the morning, after the Thabo has left, the eldest son wakes up and bathes near the sponge where his siblings are sleeping. He said;

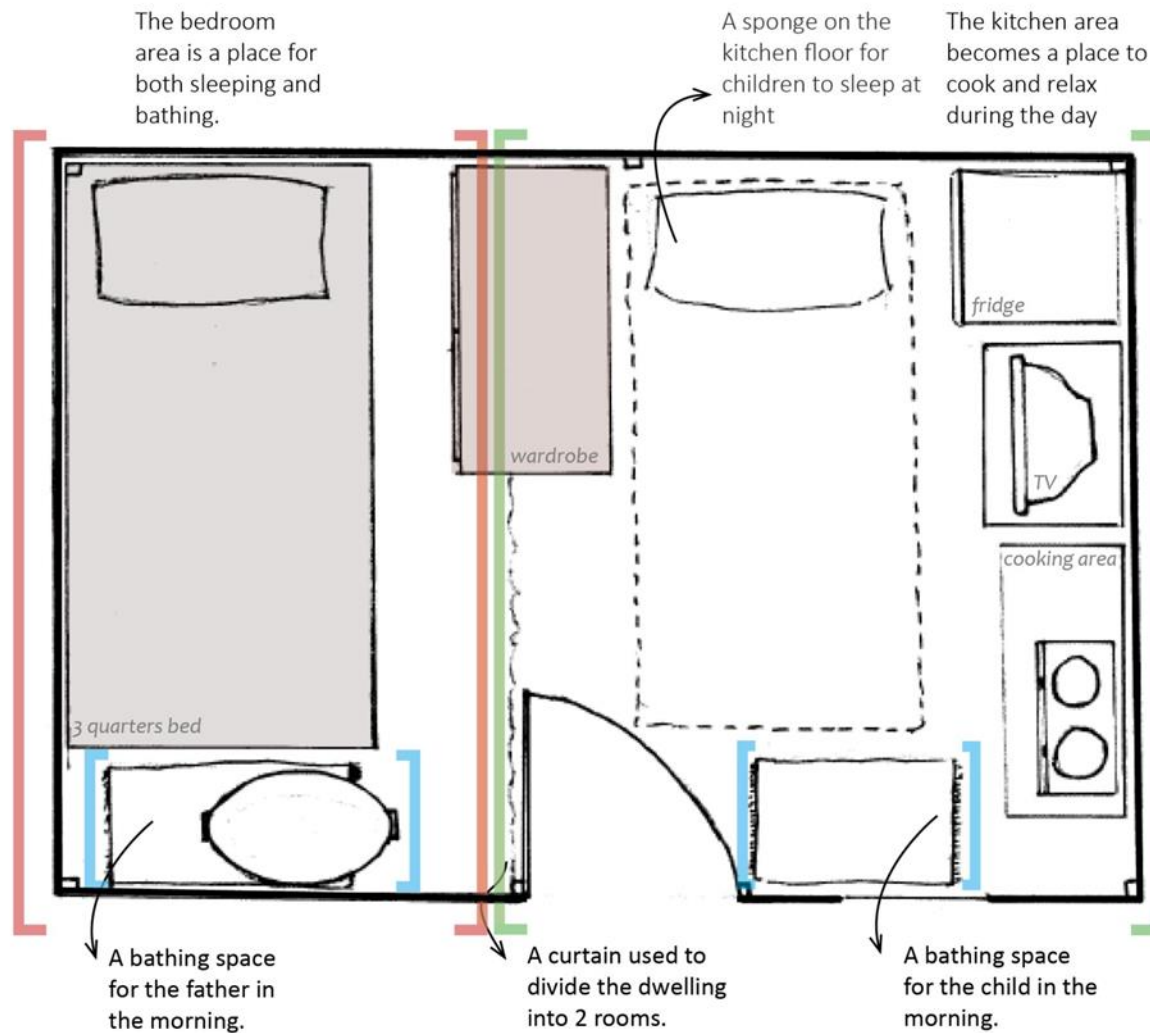
“My son has to bath near the sponge in a small space, and although he is not comfortable, he cannot wake the other children up to make more space for him, he just has to make do”

The mother works at home in a small shack used as a shop. Therefore during the day, when most of the people are gone the

curtain is left open. This creates an open space of the house where the mother uses the kitchen to cook, and she can relax and watch TV. Her youngest child will also be playing in the space they usually sleep on (the kitchen/ lounge floor).

Limitations

Thabo stated that they are not always comfortable when they sleep at night, especially the children who sleep on the floor in the kitchen, but they have to make do with what they have. If he had more money, he would extend his dwelling so that the children have a bigger space to sleep on. However, the children are still young so as soon as he is able to get a better paying job, he will be able to extend the dwelling or move to a bigger house.



BACKYARD DWELLING 1



Family structure: nuclear family

Backrooms: shares yard with 3 households

Services: Uses outside tap and toilet

Electricity connected with main house

Rent: R 350



Dwelling typology:

corrugated iron

Self-built

Size: 1.5 room



constant spaces

changing spaces

by Selepe (2016)

Figure 3.2; Spatial configuration of Thabo's backyard dwelling

4.4.1.3 Tenant profile 2

The second participant is Namhla who lives with her three children, at the ages of 3, 15 and 20 years old. She said that they moved from the Eastern Cape and have been residing in Bram Fischerville for two years. When she first arrived in Bram Fishersville, she lived at her sister's house. However, because she had a family of her own, she needed more space and therefore had to find her own place. She bought a two room shack from the zozo company then negotiated with the landlord about putting her shack in his yard. She shares the yard with two households who bought their dwellings the same way she did.

4.4.1.4 Spatial reconfiguration

The house shared by the family is a two room dwelling. It can fit a double bed, wardrobe, a fridge, couch, kitchen cabinet and a small TV stand. The size of the dwelling allows the room to be divided into two separate rooms. Although there is no physical division of the room (such as a curtain or a wall) the furniture demarcates the uses of the room; the one side is a bedroom area and the other side is a kitchen and living room area, she states that she prefers to keep the bedroom strictly for sleeping and dressing up and the kitchen can be for other activities (figure 3.3).

Namhla moved into another backyard dwelling, where she shares it with her partner, and although she is with her children most of the time in the one house, she usually sleeps in the other. This way her children can share a bed, whereas before she moved out, one child had to sleep on the floor while Namhla slept on the bed.

The kitchen area is where spatial reconfiguration occurs; this means that it is the space where a multiple of activities in the house take place. They can cook, watch TV, and because they can fit a couch, the family can also use it as a lounging area. During the interview, the oldest daughter washed her younger brother, in a plastic tub in the kitchen area, in front of where my friend and I were sitting. Namhla states that they always take turns bathing, while the one person baths, the other is waiting for their water to boil.

The challenge experienced by the household is related to the size of space they have. The problem is that they cannot accommodate other people who would wish to visit overnight. She wishes her daughter could invite her friends to sleep over the same way she is able to visit her friends. The mother says she wishes she could extend her house because her daughters are growing up and they would like their own space and privacy in their house. Extra space could be made possible by extending the house, but that would mean they would have to pay more rent.

BACKYARD DWELLING 2

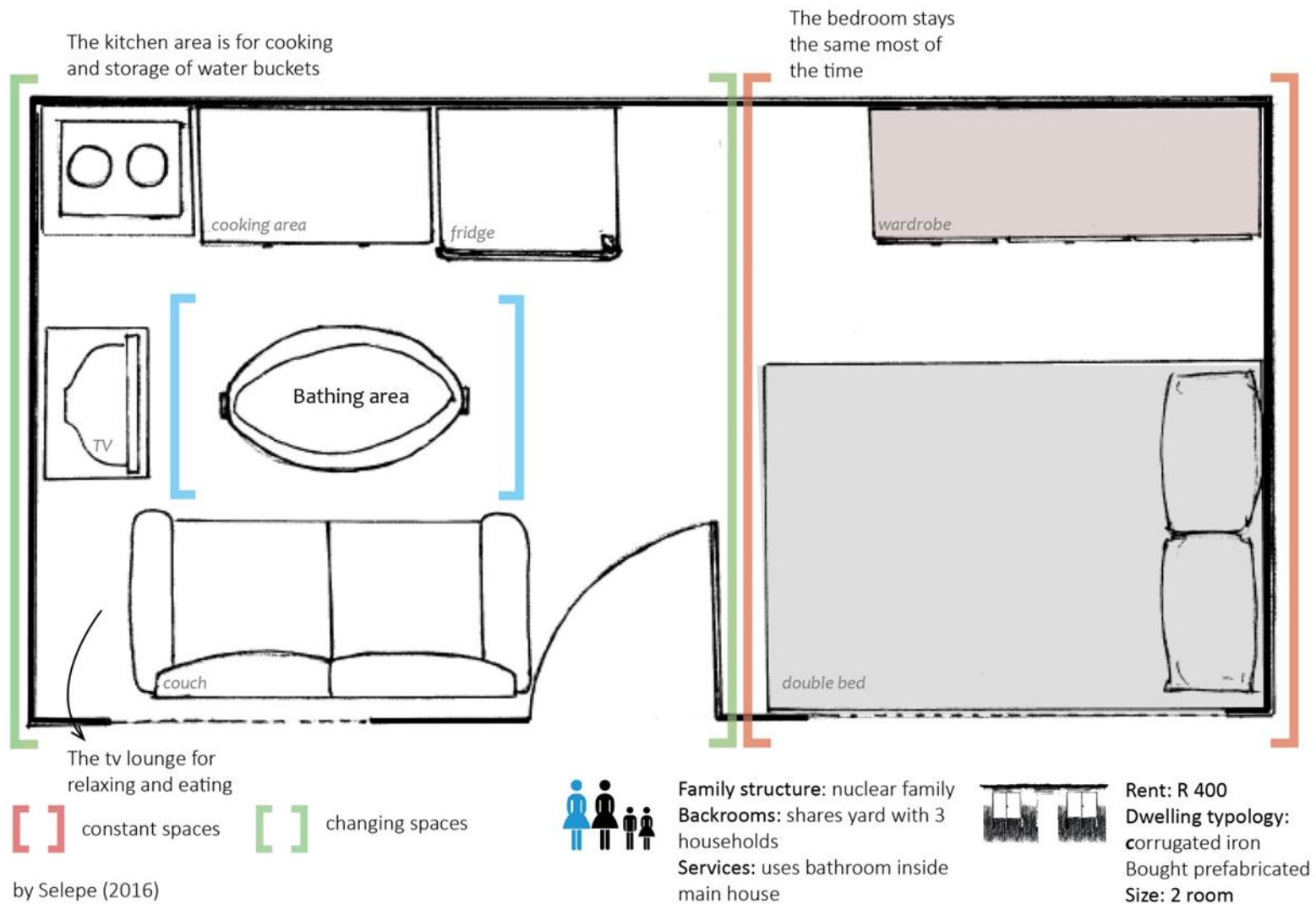


Figure 3.3; Spatial configuration of Namhla's backyard dwelling.

4.4.1.5 Tenant profile 3

The participant was Mapitsi, a young woman who has been living in Bram Fishersville for three years. She indicated that before moving into the shack they stay in, they used to live in another house down the street. However, the women she shared the space with did not treat her well. Therefore, she decided to move. She and her husband wished to own a backyard dwelling but did not have enough money to buy. They then negotiated with the zozo people, paid the shack in deposits and were able to move into their new home within a month. She shares the yard with one household who self-built a big shack that fits a family of five as well as the landlord.

4.4.1.6 Spatial reconfiguration

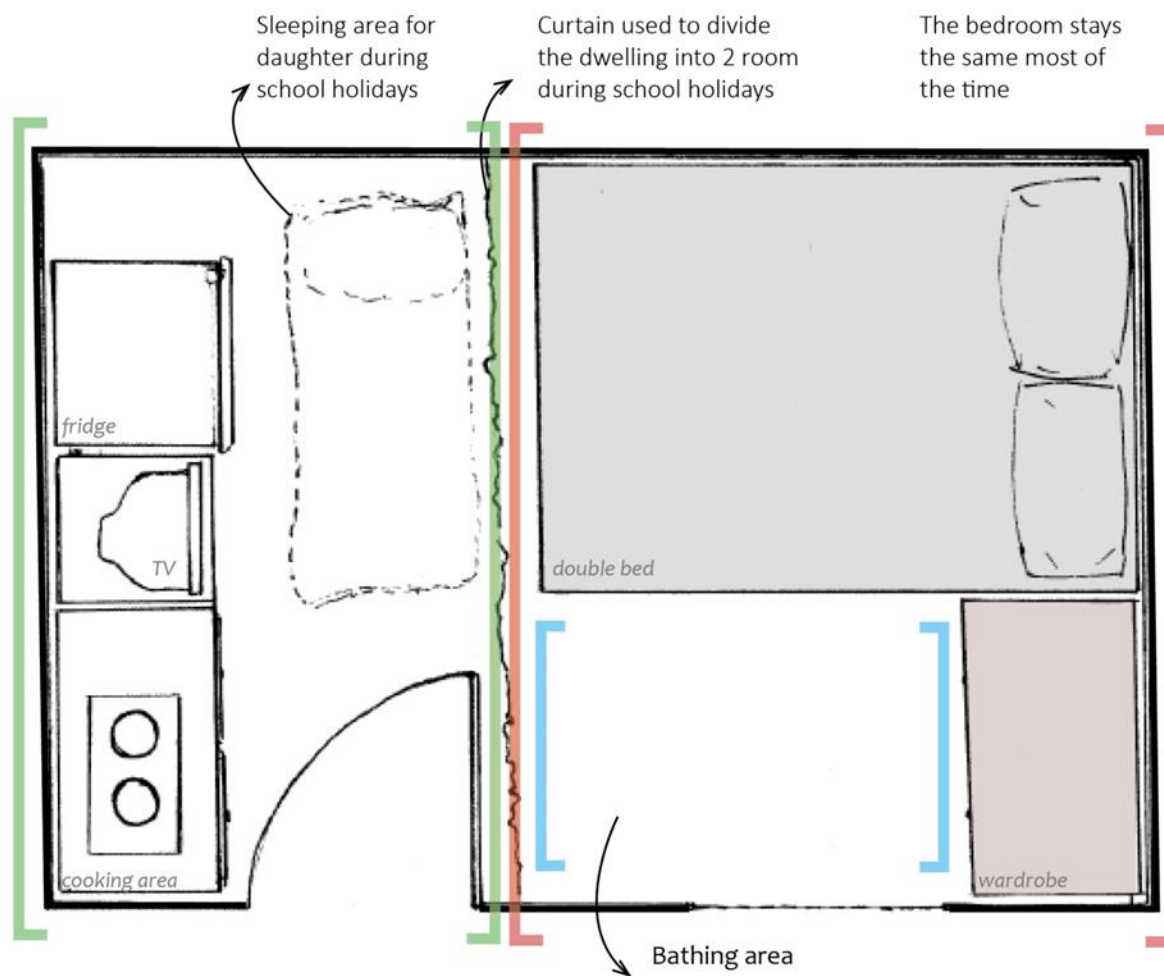
Mapitsi and her family lives in a 1.5 room shack with her husband and one-year-old son. Their other daughter lives with her grandmother and usually comes home during school holidays. The furniture they can fit into the house is a double bed, fridge, wardrobe, TV stand and a cooking area.

Mapitsi says that, while her husband is at work, she is home taking care of their son, she gets to enjoy her space. She keeps the dwelling as one open room. Although they have a small dwelling, they have a

small family so she does not necessarily need any extra space and privacy from her husband or her son; therefore, everyone uses the space in the same way. Spatial configuration to her on a daily basis becomes significant regarding her using the house as a place for her to relax once she is finished with all domestic activities (figure 3.4).

However, during the school holidays, when their daughter is at home, is the time where the family needs to create two different spaces for the parents and the children. It is during this period where the family uses a curtain to divide the room into separate sleeping areas and to enable visual privacy for her and her husband. The daughter then uses the kitchen area as a place to sleep on the floor. This configuration and change of use occur every day until her daughter goes back to school.

Mapitsi highlighted that the space they have is enough to do everything they need. However, she wishes that one day she would have enough money to extend the dwelling so that she can buy more furniture and have space to create different rooms in her house.



BACKYARD DWELLING 3



Family structure: nuclear family

Backrooms: shares yard with 2 households

Services: uses both inside and outside toilet.

Electricity connected with main house

Rent: R350



Dwelling typology: corrugated iron

Bought prefabricated

Size: 1.5 room

[] constant spaces

[] changing spaces

by Selepe (2016)

Figure 3.4; Spatial configuration of Mapitsi's backyard dwelling.

4.4.2 Backyard Typology 2

This section represents backyard rooms that were built by a landlord for the purpose of renting them out. Figure 4.1 illustrates the different typologies of the extra rooms. They are usually very visible and are not always at the back of the yard.



Figure 4.1; Backyard dwelling built by landlords in Bram Fischerville (Selepe, 2016).

4.4.2.1 Tenant profile 4

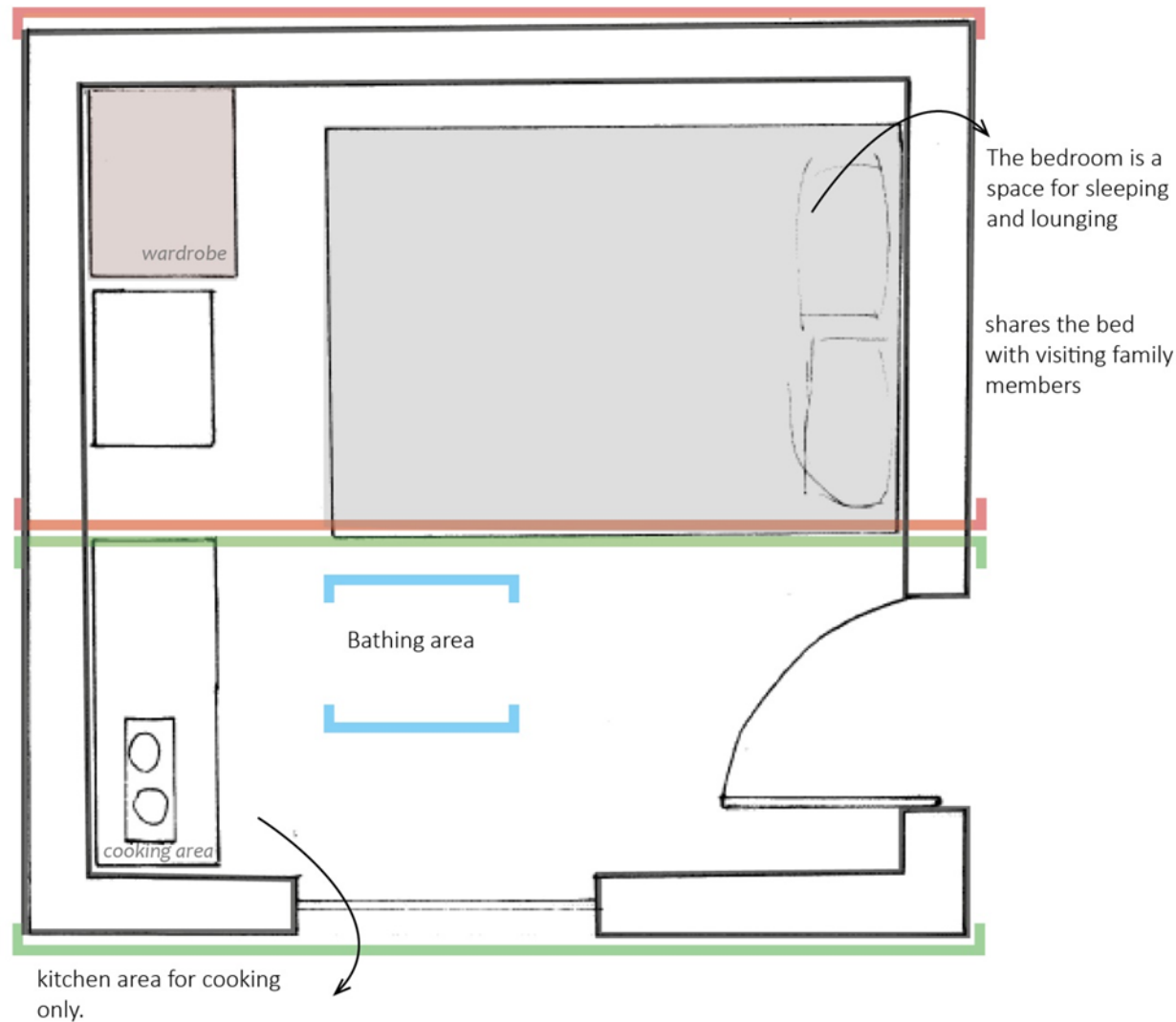
A young woman named Lerato has been living in Bram Fischerville for a year. She used to stay with her aunt in Tshepong, but she moved because she needed her own space. She found a place through a lady that she used to work with and was able to move into her room within two weeks. She said “You know when you need a place you will hustle, so I hustled, and I found it very quick.”

4.4.2.2 Spatial reconfigurations

The lady lives in one open room. The furniture she is able to fit in is a double bed, wardrobe, table for a small TV and a kitchen cabinet. She deliberately demarcated the uses of the room into the kitchen area and the bedroom area. Although she lives alone, she says it is important for her to keep it divided because it brings dignity to her space.

“I have my own rule, which is that this is my kitchen and that is my bedroom. It is easier to keep it clean, and you cannot be put a kettle on top of the bed near where you put your toiletries.”

The lady spends most of her time during the day at work. Her mornings start with her taking a bath in the open area near her bed. However, during the weekend she baths in the main/landlord house. The space left between her bed and cooking area is used to accommodate friends and family who come over and visit her. She can also share her bed and also use the floor for an extra sleeping area. Spatial reconfiguration does not happen on a daily basis. This is because the house is demarcated into different functional spaces using the furniture (figure 4.2), and also the fact that she lives alone. As a person who acquired backyard housing to move out of the family's house. The dwelling itself provides a sense of privacy and comfort for her.



BACKYARD DWELLING 4



Family structure: single woman

Backrooms: shares yard with 2 other rooms and main house

Services: uses both inside and outside toilet.
Electricity connected with main house

Rent: 700



Dwelling typology:
built room by landlord

Size: 1 room



constant spaces

changing spaces

by Selepe (2016)

Figure 4.2; Spatial configuration of Lerato's backyards dwelling.

4.4.2.3 Tenant profile 5

Tshego lives in a prebuilt backroom with her 16 year old son. She has been residing in Bram Fischerville for three years, and she moved from Meadowlands because she wanted her own place to stay. The backrooms are built attached to each other, so she shares the yard with five other households. She says that she pays rent of R 750, which includes electricity. She said,

“The rent here is very reasonable. Ever since I moved here, it only increased by R50. Other people rent for R1000 and R 1200, so here it’s cheaper.”

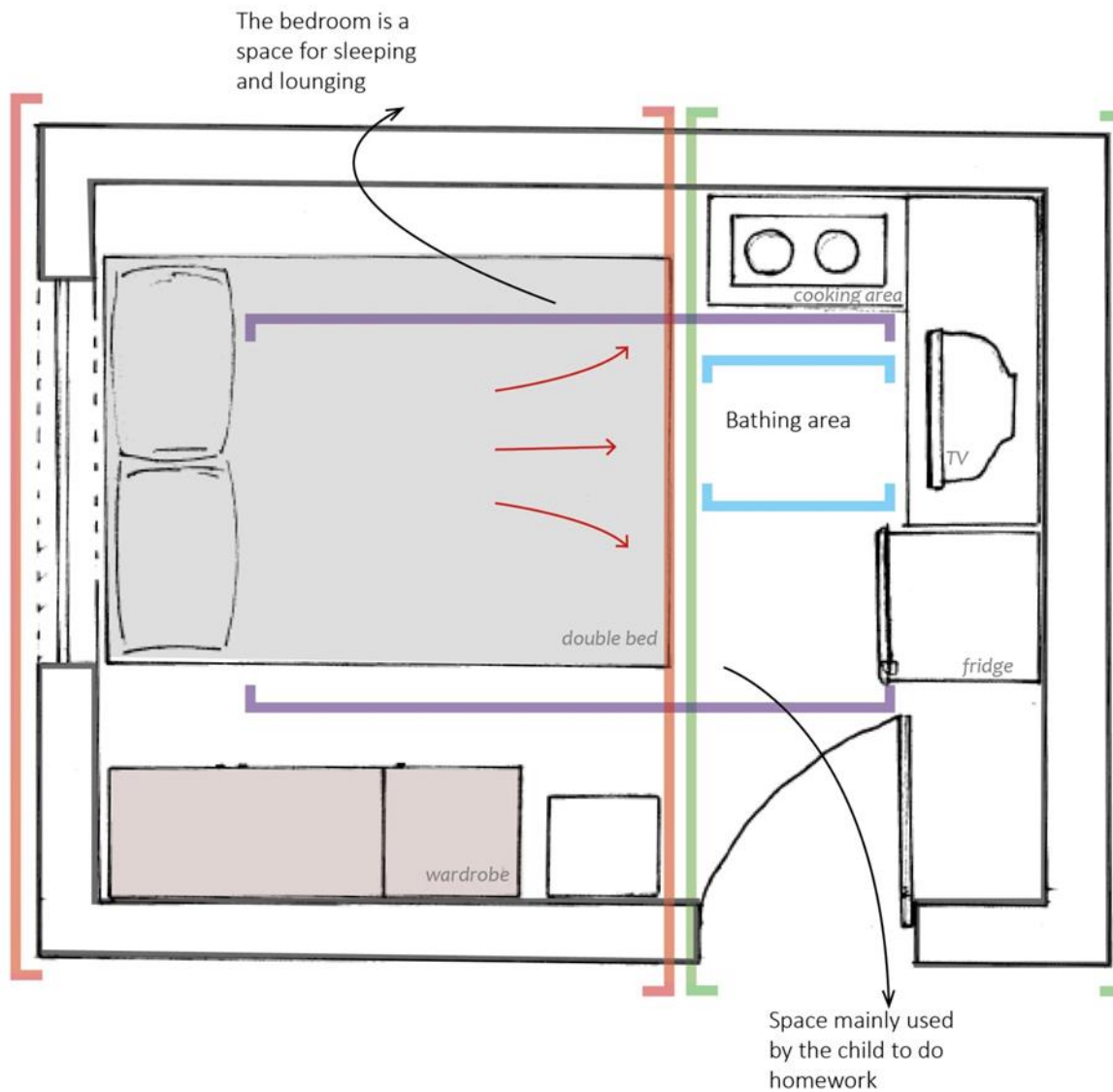
4.4.2.4 Spatial reconfigurations

Tshego shares a room with her son. The furniture they have is a double bed, a wardrobe, a small table for cooking, a fridge and another table to her TV. As indicated in figure 4.3, the furniture is placed along the wall with a central open space. This means that everything that the family has to do occurs within the little space available.

During the week Tshego and her son use the same space to take a bath so that one goes to school while the other goes to work. This is the same space they use when they are home to prepare dinner as well as for the son to do his homework. The TV is located opposite the bed; this means that they can then sit on the bed and eat and

watch TV. Tshego states that she feels as though her room is very small to accommodate both her and her son as well to engage in all household activities.

The size of the dwelling and the arrangement of the furniture may be the reason why she feels as though her house might be too small. As a result, during the holidays Tshego states that her son goes to his aunt's house, where he is given his own separate room to sleep, and he can enjoy his privacy.



BACKYARD TYPOLOGY 5



Family structure: mother and son

Backrooms: shares yard with 4 households and main house
 Services: uses outside toilet and tap.
 Electricity connected with main house
 Rent: 750



Dwelling typology: built room by landlord
 Size: 1.5 room

constant spaces

changing spaces

by Selepe (2016)

Figure 4.3; Spatial configuration of Tshego's backyard dwelling

4.4.2.5 Tenant profile 6

Nkosinathi lives in a pre-built backyard dwelling on his own. He has been residing in Bram Fischerville for a year. He moved to the area because he wanted his own space and to be closer to his place of work. He is one of the tenants who share the yard with the previous household (tenant 5). Therefore he also pays R750 per month for rent and shares the yard with five other households.

4.4.2.6 Spatial configuration

As illustrated in the drawing, the furniture he has is a double bed, a wardrobe, a small area for cooking and a fridge. During the interview, he was changing the arrangement of the furniture. The dwelling was first configured the same way as 'tenant 5', but he moved the furniture around to create a different space.

Spatial configuration, in this case, was used to create two functional spaces. The dwelling was deliberately re-arranged because it gave him a sense of privacy, for example, he stated that in the previous arrangement, the bed was facing the door and when people came in he did not feel comfortable because sometimes people would walk in and the first thing they would see is his girlfriend lying in bed.. Thus He used a wardrobe to divide the dwelling to create two spaces, and to hide the bed from the door. As a result, the bedroom area becomes a space where he can relax and enjoy his privacy. The

television is also located opposite the bed, making it a space for lounging and eating (figure 4.4).

4.4.3 CONCLUSION

Spatial configuration of backyard dwellers in Bram Fischerville has been used to illustrate the relationship between the spatial, social and economic aspects of backyard housing. The findings reveal that people change their space according to the dwelling typology and size as well as the household size. These aspects affect how space can be reconfigured to accommodate backyard dwellers as well as to engage in their necessary activities and access services.

Majority of people have indicated that they benefit a lot from living in backyard housing because it has given some a place to stay close to work and other a place to raise their families. All the respondents stated that they are able to do everything they need and would only need a bigger space to accommodate for additional people or improve their comfort. The major challenges arose from services, one is the access to ablutions in the main house when they are not available outside. For easy access there needs to be a sense of trust and communication between the landlord and tenants. Another issue was electricity, as people lack coordination and control on the level of electricity they use. So in some instances pressure would

affect the service but mostly it was about paying an additional amount when the monthly bill would be used up.

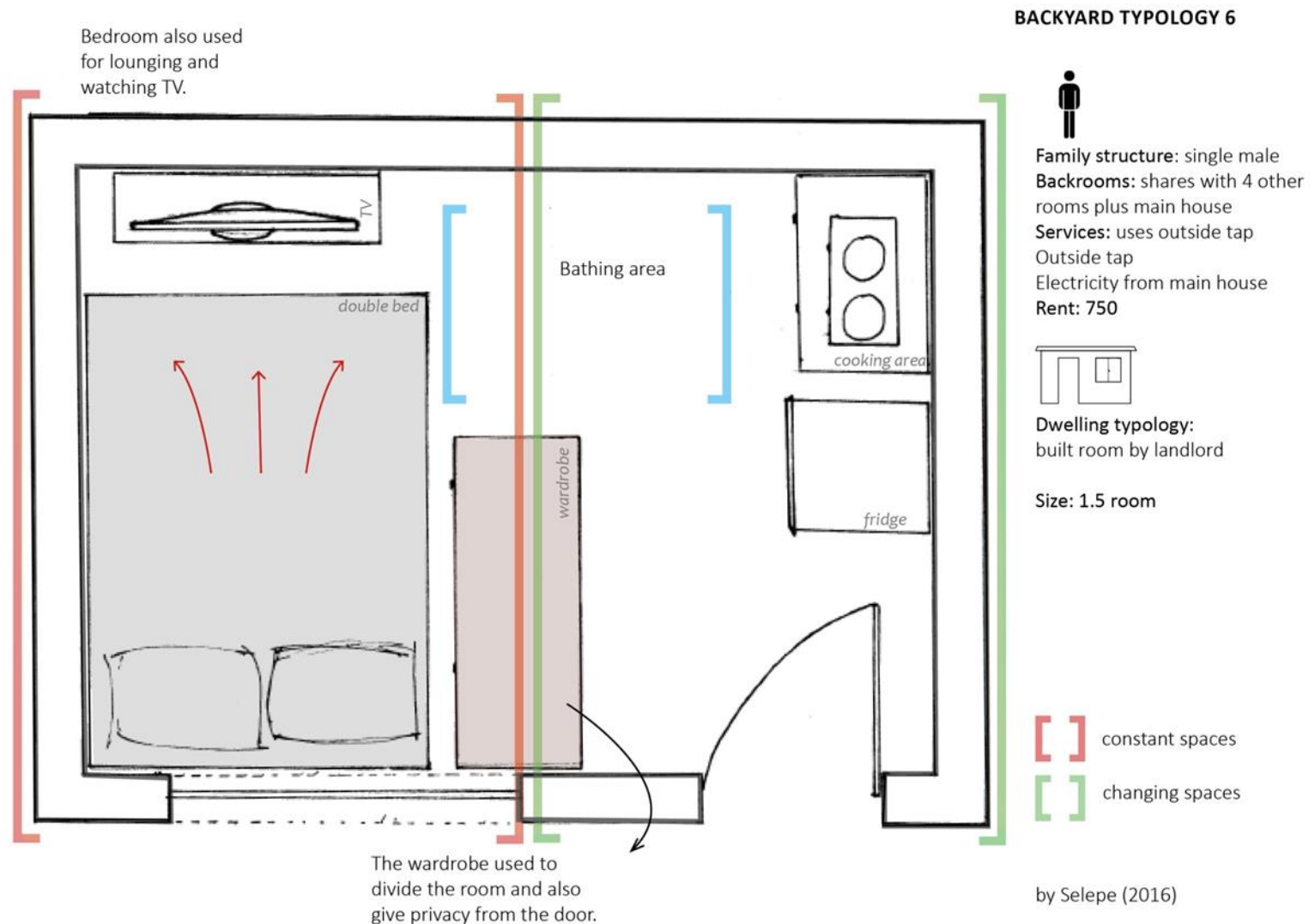


Figure 4.4: Spatial configuration of Nkosinathi's backyard dwelling

5 ANALYSIS

5.1 INTRODUCTION

This chapter provides an analysis of the findings represented in the research. The purpose is to illustrate how backyard dwellers have shown their resilience through adaptive strategies that helped them maintain their livelihoods. The analysis uses the key concepts that emerged from the literature review and conceptual framework, flexibility, negotiability, social capital and economic sustainability to assess how backyard dwellers use their household spaces.

The section is organised into two main sections; firstly, the communal scale, which represents an analysis of the physical and social outcomes of external spaces that are shared by the backyard dwellers and landlord. Secondly, the households level which is an illustration of the dynamics within internal spaces of backyard houses.

5.2 COMMUNAL (EXTERNAL SPACES)

5.2.1 Flexibility and diversity

Backyard housing has been argued to be a flexible form of accommodation (Lemanski, 2009, Shapurjee and Charlton, 2013,

Turok and Borel-Saladin, 2015). This has been a crucial aspect of backyard housing because it illustrates the ease of acquiring backyard housing as well as moving out of it when one is faced with challenges or opportunities arise. Many of the respondents have been able to move in and out of backyard housing because they needed their own space to raise their families or be close to proximity. For one particular respondent, when she felt threatened at the place she used to stay, she was able to move as soon as she could afford to do so. This form of flexibility is important because people can manage change (Canford, 2013).

Many people have moved to areas such as Johannesburg to access economic and social services (Shapurjee et.al 2014). The lack of affordable housing at the level which is demanded and close to employment opportunities has meant that people have relied on backyard housing (Financial and Fiscal Commission, 2013). Spaces meant for RDP houses in Bram Fischer have been reconfigured to support the development of backyard housing similar to that described in Westlake by Lemanski, (2009).

The external spaces of backyard housing have been reconfigured in the sense that they can be used by various households. People can use the area outside to engage in necessary domestic activities such as doing their laundry. In Bram Fischerville most respondents use the space outside because of their limited space inside the house.

Resilience is achieved by the resources available to people (Adger, 2000 and Kirmayer et.al, 2009). Backyard spaces are not only reconfigured to house people, but services are modified and made accessible to backyard dwellers. As Latergan and Cilliers (2015) highlighted that the development of backyard housing prompted by the services already available in the area they are located, all the respondents in Bram Fischerville just acquired a place to stay and services such as water, ablutions and electricity were made available for them.

However, the flexibility of services can be limited. One way is that landlord may hold power by restricting access to certain services, as revealed in the findings that landlord can control tenants from entering the house for ablution. It has been argued that backyard housing may place also pressure on the existing services in their location (Lemanski, 2009 and Shapurjee and Charlton 2013).

Majority of the respondents have also indicated that electricity is a major issue because they cannot control how much they use.

5.2.2 Negotiability

The flexibility of backyard housing has also been made possible by its negotiability. Backyard dwellers have indicated that negotiation is an important strategy used when obtaining housing. People often arrange to place their dwellings within backyard yards of RDP houses, and they negotiate rental agreements with the landlord (Watson, 2009). As indicated by the respondents in Bram Fischerville, people rely on negotiation with the landlord, who will then come up with the rent and rules for renting out.

The spatial configuration that has been driven by the development of backyard housing also occurred through the change and meaning of space (Thungsakul, 2001). Once living in backyard housing, tenants and landlords negotiate how they can use the space they share. As indicated in the findings, people come up with rules and routines on how and when to engage in the activities they need as well as to maintain the area they share. For example, washing their laundry or cleaning toilets on specific days or time. The negotiations that backyard dwellers have amongst themselves as well as with the landlord help them maintain their sharing of spaces.

5.2.3 Social capital

The physical arrangements of yards within RDP settlements have been changed to accommodate the development of backyard dwelling. The area shared by tenants and landlords is a space where social networks and relationships can be formed. We see this with backyard dwellers living in Bram Fischerville from the fact that they benefit from sharing space and resources with other tenants and landlord.

The respondents have also indicated what Lategan and Cilliers (2015) highlights, that people living in low-income settlements use each other as social resources, where people can gain support and thus benefit from living together. It is with these relationships that backyard dwellers can endure challenges they may face. As a result, they communally gain the capacity to manage their resilience by investing social, informational and physical resources and thus improving their livelihoods (Kirmayer et .al 2009).

5.2.4 Economic sustainability

People live in backyard housing do so to enjoy its locational benefits. One of the important things is being close to opportunities for employment (Shapurjee and Charlton, 2013). The findings reveal that some people move to Bram Fischerville in the hopes of finding a

job while other choose to live in the area because of being closer to work. This means that people spend less on things like transport and can be able to pay for other expenses (Lemanski, 2009).

Although the findings did not include the landlords, Lemanski (2009) argued that people who live in RDP housing may be unemployed or part of the low-income group. They also benefit from backyard dwellers who bring in an additional income which may help to pay for their expenses.

5.3 HOUSEHOLD (INTERNAL SPACES)

5.3.1 Flexibility

Backyard dwellers have different household sizes and varying levels of affordability. Large households who may not be able to afford a big house that will comfortably accommodate everyone will need to rely on the backyard dwelling space they have. This means that they would need to find a way to adapt to the space they have and still be able to engage in the necessary activities. As a result, people use spatial reconfiguration as a strategy to create a space that enables them to use in a diversity of ways (Mzoori, 2014). Some of the respondents have indicated that the physical arrangement of furniture and other elements within their house can form a

multipurpose space to sleep at night, relax during the day and engage in domestic activities (Thungsakul, 2001). This is imperative because households have created functional spaces (Mzoori, 2014 and Thungsakul, 2001) within their dwellings.

However, not all backyard dwellers in Bram Fischerville use spatial reconfiguration on a daily basis, for example, one household changes the use of space when their daughter comes during the school holidays. The family has to divide the house into two functional areas; one as a bedroom for the parents and the other as a kitchen (where the child can sleep in during at night). Households also use a flexible material to divide their homes. The curtain does not permanently divide the house, meaning the family can put it up and remove it as they please. Therefore, during the day the dwelling can be used a single room, where the family lounges on the bed and watch the TV.

Those who have smaller household sizes do not rely on the everyday change of space to engage in a variety of activities. They use furniture as a way of demarcating the use of space. However, when a change occurs, such as accommodating visitors, friends and extended family members, they can quickly reconfigure their homes.

What is important is how flexibility has contributed to the resilience of backyard dwellers. Although they might be faced with a challenge of having a small space, people can still rely on their own space to maintain their livelihoods. Flexibility of spaces enables individuals and households to engage in the necessary activities without having to rely on additional place.

However, their resilience is often affected because the flexibility of space is limited. Households who rely on all the space in the house cannot accommodate for extended families. All the respondents who lack additional space indicated that not being able to accommodate other people is a problem because it limits their interaction with family and friends.

Another limitation is that despite being able to engage in the necessary household activities and housing themselves, some of the backyard dwellers often have to compromise their comfort. In order for them to have that comfort that they need, it would mean getting a bigger place, of which that is limited by the low levels of affordability.

5.3.2 Negotiability

Spatial reconfiguration within backyard housing is not only driven by the need to accommodate and engage in a variety of activities, as

Mzoori (2014) highlights, socio-cultural aspects of households also shape the way in which people arrange and use space. Individuals and households living in backyard housing often negotiate how the reconfiguration of spaces takes place. As noted in the findings, despite the size of the dwelling and family, aspects such as gender, privacy and family structure are significant drivers of the way space is used.

As highlighted by Mzoori (2015), spatial arrangements are a way of restricting society's use and behaviour within a space. One essential socio-cultural aspect that governs the formation of internal spaces in a house is the level of privacy required by individuals, and to separate the different genders (Mzoori, 2015). Most backyard dwellers have indicated that they deliberately arrange furniture as a strategy that demarcates how space is used and by whom it can be utilised. This has been done by explicitly placing furniture to differentiate between the kitchen and bedroom area. For households with mixed genders or nuclear families, they purposely divide the dwelling with a curtain as a way of negotiating how space is to be used Thungsakul (2001). Backyard dwellers partition of space emphasises on their need for privacy and gender, despite the limits of space they have.

Privacy is not only gained through the partitioning of space but also by living in backyard housing itself. The findings reveal that backyard dwelling has also attracted younger individuals. They reap the benefits of living alone in a space that gives them sense privacy. For example in the findings, people move out of their families homes to live in their own place. It gives them a chance to raise their own families, be close to employment as well as to make their own choices.

The formation of the dwelling can also affect the comfort of households through the same socio-cultural lens. Negotiation of space is changed when households or individuals are limited to the space they have and cannot change it to improve their level of comfort. An example of this is tenant 5 who shares her dwelling with her son. They have arranged their furniture against the walls and are left to use the limited space in the middle. Although Saruwono et.al (2012) argues that the "centralised" arrangement of furniture is beneficial for those who prefer a big open area in a room. However, the lady and her son have a small space which affects the way they live.

Backyard dwellers have been able to adapt to the limited space they have through negotiation. Although this negotiation might not be

verbal and rather driven by socio-cultural factors of households, it has enabled them to govern how they make use of the household space they have and thus to provide for their needs and sustain their livelihoods. However, for those who have limited negotiation, their resilience is affected because they are in constant worry and stress about wanting to living in a bigger space that will accommodate their family members, which is usually worsened by their limited affordability for larger place.

5.3.3 Economic sustainability

The development of backyard housing has not only been due to the ability to gain access to housing and services, but also because of its affordability. As Watson (2009) highlights backyard dwelling is often a cheap rental option which has managed to absorb low-income households. 'This is the main reason why all respondents in Bram Fischerville live in backyard housing. Households can accommodate each other and also be able to pay for other expenses in the house.

Lemanski (2009) argues that in most instances, there is a balance of power between landlord and tenants. For example, in RDP settlements, landlords depend on backyard dwellers because they benefit from the extra income to pay for household expenses, additionally, backyard dwellers also benefit from space and services

that receive from landlord. This power balance is essential because landlords are compelled from randomly increasing rental prices 'and therefore backyard dwellers may not be faced with challenges of increasing rental prices.

As mentioned earlier, flexibility of backyard housing is often limited by the inability to extend their backyard housing to either accommodate family members with ease as well as to buy more furniture for their comfort. This limitation is caused by the lack of affordability of a bigger space. The findings reveal that most of the backyard dwellers cannot extend their dwellings because it means they would need to pay more rent. As a result, peoples comfort is often compromised and they are only limited to do the things that they really need, to uphold their livelihoods.

5.4 CONCLUSION

As argued by Pike et.al, (2010) humans are the essential drivers of adaptation that can influence their resilience. People through adaptability; show a level of self-organisation which determines the capacity that they can transform from undesirable situations (Folke, 2006 and Walker and Salt 2006). Backyard dwellers have shown a

certain level of resilience through the use of various strategies to maintain and improve their accommodation circumstances.

As highlighted by Rakodi and Lloyed-Jones (2002) and Alinovi et.al (2010), people engage in livelihood strategies as a means of achieving their livelihood goals. Often limited by affordability and space, backyard dwellers have found a way to not only house themselves but also to undertake in strategies in order to earn a living, sustain their families and provide for their needs.

Weakley (2013) argues that adaptation through informality is a kind of resilience because individuals and households are given an opportunity to improve their quality of lives. He also states that the greatest strength of informal systems is the level of adaptability to change. Through spatial reconfiguration, their resilience is illustrated because people can often overcome challenges such as; a lack of income that would allow them to enter formal systems, such as buying a formal house, as well as the need to raise new families, to take advantage of living close to economic opportunities and to access services. As a result, backyard housing has played a critical role in improving lives of backyard dwellers living in Bram Fischerville.

Unpacking the linkages between spatial, social and economic aspects of backyard housing has given a way to understand how people can

use the restricted space and resources to gain a better life. It is not only the ability to thrive with the limited resources they have but to transform. The development of backyard housing has also given provision for communal resilience, where backyard dwellers collectively can manage their resilience (Walker and Salt, 2006). This is the kind of transformative resilience (Davoudi et.al 2012) shown by backyard housing as well as backyard dwellers as they have the ability to shape their space to create a desirable situation.

6 CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

South Africa experiencing urbanisation has led to the growth of informal housing in urban areas (Financial and Fiscal Commission (2013 and (Muzondi, 2014). This is due to the fact that, despite having delivered over 3 million subsidised housing, the government has not met the high demand of housing failure from the private sector to absorb the demand for low income households has also contributed to this problem. (Shapurje et al. 2014 and UN-Habitat, 2016). As a result, informal housing has risen as an affordable form of accommodation that offers locational advantages such as employment opportunities, access to services and infrastructure (Turok and Borel-Saladin, 2015).

The aim of this research is to illustrate the linkage between socio-economic and spatial characteristics of backyard housing and the needs that drive the reconfiguration of space. This was done to gain an understanding on the spatial reconfiguration used by dwellers to support their livelihoods.

This research comprises mainly of a qualitative method, which was used in order to draw information on the backyard dwellers in Bram Fishersville and their living spaces. It is mainly made up of the involvement of the backyard dwellers which aided in investigating the nature of their occupation in backyard rooms as well as the available shared infrastructure and social resources with their landlords and other tenants. In order to gain an understanding of the backyard dwellers themselves, 14 interviews were conducted of people who lived in different backyard topologies and different household sizes. This was done to investigate the socio-spatial relationships of backyard housing through an assessment of their spatial reconfiguration to go about the daily lives. Therefore, the aim was to understand the different mechanisms people use to obtain backyard housing, the ability to accommodate their families as well as how they engage in their various household activities. It was also to understand the relationship within their shared backyard spaces; the networks formed as well as the ability to use each other as social infrastructure.

This research has looked at two different scales as well as two typologies of backyard housing. With the first scale, being the communal level, which is the RDP yard where the backyard dwelling is built and people share their external spaces and services. The

household level, being the second scale is the internal spaces of each backyard dwelling. The two different typologies found were dwellings made from corrugated iron and rooms built. The first typology was either self-built by its occupants or bought prefabricated from a supplier and the landlord using brick and mortar builds the other. The two typologies assisted in assessing different sizes and levels of affordability from various households.

This research draws on the existing literature on adaptive and transformative resilience which give insight on the ability of systems to overcome various challenges (Davoudi et.al, 2012). The aim is to explore the linkages between backyard housing and resilience to provide a framework for the analysis of findings. It is illustrated through the use of spatial reconfiguration as a livelihood strategy to meet the livelihood goals of backyard dwellers. Therefore, resilience is a concept used to illustrate individuals, households and the society ability to show their adaptation and how they overcome challenges.

The findings have revealed strategies that people use to reconfigure space demonstrate their resilience. This process gives backyard dwellers the opportunity to accommodate themselves as well as multiple households in a space that is ideally meant for a single household.

6.2 RELEVANCE OF RESEARCH

The large scale of backyard housing in Johannesburg and Bram Fisherville, as well as critical elements revealed in the findings demonstrate that upgrading interventions should not be looked at as just replacing the informal with the formal (Shapurjee et.al, 2014). These elements contribute to an understanding of backyard housing through socio-economic and spatial aspects because they drive the development of backyard dwelling as well as help improve the well-being of individuals and households. Thus, they are essential in understanding how backyard housing can be viewed in future.

The findings exhibited crucial factors that can be considered or mitigated when thinking about upgrading interventions and designing housing for backyard dwellers. Firstly, at the communal level, the spatial configuration of backyard housing in a yard has created a place where relationships are formed; social resources are invested and transferred to one another (Kirmayer et.al 201). We could see that social capital contributes to the well-being of individuals and households because people rely on each other and overcome certain challenges that they may face. Therefore, it is clear that backyard dwellers benefit from living together. This is essential to understand in order to design better spaces for backyard dwellers.

Communal spaces cannot be lost in the process but instead they should be embraced to enhance to the level of social networks that exists among people.

However sharing social services is not the same as sharing physical services. People have to rely on negotiation to access these services; this can lead to increased pressure placed on the existing infrastructure. For example, people face challenges due to the inability to control the amount of electricity they use (through prepaid meters from the main house), limited access to toilets and not being able to do anything about it which is often due to poor relationship with the landlord. Using resources that are meant for a single household can cause technical problems with unsafe connections (Lemanski, 2009).

Illustrating backyard housing at a household level has also provided an understanding of individuals and their adaptive capabilities that ensure an improved quality of life. When thinking about designing housing for backyard dwellers, household socio- cultural and economic needs are important indicators of how the development and design of backyard housing can be shaped. Despite the dwelling size of backyard housing, the findings reveal that households require privacy; parents want to separate themselves from their children and

different genders need to be separated. Another aspect is that, there is a certain level of comfort people need from their homes. Although some might receive it, those with larger families and a small space often have to compromise it.

6.3 LESSONS FOR PLANNING

The aim of this research was to illustrate how backyard dwellers in Bram Fischerville have used spatial configuration as a way to manage and maintain their living spaces. The spatial perspective of backyard housing can help to use design as a way to improve the living conditions of backyard dwellers.

Housing interventions such as the Empower Shack (figure 5.1) is an example of a housing design that addresses some of the issues that people living in backyard housing face while embracing existing systems that people have put into place. The “Empower Shack” is an ongoing project facilitated by the Urban Think Tank in collaboration with the local NGO Ikhayalami Development in an informal settlement in Khayelisha, Cape Town (Urban Think Tank, 2013).

The shack is a two storey dwelling that is built on the existing area where people live. The Urban Think Tank, (2013) and Tory-Henderson (2016) highlight that the dwellings are built as two storey

to reduce the footprint of the house, which creates an open communal space outside while it gives households more internal living space (figure 5.2). Tory-Henderson (2016), argues that the dwelling can be reconfigured according to what each households need. They are equipped with more space, private toilets for each household and a kitchen area (Urban Think Tank, 2013).

The project was designed as a tool to drive development that tries to maximise space while being able to accommodate household. The housing intervention involved the community as well as the government to find the best solution for people living in informal settlements.

What can be taken from this project is both the physical and social aspects of the design. Firstly, by taking into consideration all aspects that people use to earn a living and maintain their well-being through backyard housing. Part of understanding backyard housing should be to acknowledge the adaption processes that both dwellers and landlords have illustrated through the development of backyard housing. For example, landlord's involvement in helping to alleviate the pressures of housing demand by accommodating and building additional housing for backyard dwellers. Secondly, contextualising interventions by looking at the unique strategies that people use. For

example, the project used looked at how people were actually living and found ways to improve their living conditions. Lastly, by using design to find alternative ways of shaping and improving backyard housing based on the socio-economic needs. This can help build backyard dwellings that eliminate the accommodation challenges that people face as well as improving their resilience. For example, giving households more living space without utilising all the space in the yard and also proving people with access to services that they can control for themselves.



Figure 5.1: Empower Shacks in Khayelisha, (Urban Think Tank, 2013).



Figure 5.2; internal spaces of the Empower Shack, (Urban Think Tank, 2013).

6.4 CONCLUSION

The UN-Habitat (2003) argues that people living in low income households should be encouraged to build additional rooms for renting. This is because people living in backyard housing have been given the opportunity to access housing that enables them to raise their families, access services well as employment opportunities (Lemaski, 2009, Turok and Borel-Saladin, 2015). Through this many people are able to overcome challenges. Weakly (2013) argues that informality offers a kind of resilience because it has given people a way of creating a better livelihood. For those who practice informality, it is through their adaptive capacity that they get access

to the system that have no formal access to. It is important for the government, planners and designers to understand all aspects of backyard housing in order to respond appropriately to some of the issues often associated with backyard housing. It will be essential because it will not only contribute to the development of backyard housing but improving people's quality of life and resilience. This research has illustrated how people use their own strategies to manage their resilience, with a little help from experts, backyard housing can be improved, access to services would be made better and household's level of comfort will be increased.

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8 ANNEXURES



SCHOOL OF ARCHITECTURE AND PLANNING HUMAN RESEARCH ETHICS COMMITTEE

**SCHOOL
OF
ARCHITECTURE
AND
PLANNING**



CLEARANCE CERTIFICATE

PROTOCOL NUMBER: SOAP100/24/06/2016

PROJECT TITLE:

The spatial reconfiguration of backyard dwelling in
Bram Fischerville

INVESTIGATOR/S:

Reitumetse Selepe (Student No. 707743)

SCHOOL:

Architecture and Planning

DEGREE PROGRAMME:

BSc Honours Urban and Regional Planning

DATE CONSIDERED:

18 July 2016

DECISION OF THE COMMITTEE:

APPROVED

EXPIRY DATE:

18 July 2017

CHAIRPERSON

(Professor Daniel Irurah)

DATE: 18-07-2016

cc: Supervisor/s: Margot Rubin

DECLARATION OF INVESTIGATORS

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to endure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

Signature

Date

22-07-2016

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PARTICIPANT INFORMATION SHEET

*The Spatial Reconfiguration of Backyard Dwelling in Bram
Fischerville.*

Greetings

My name is Reitumetse Selepe and I am currently a full time student studying towards an honours degree Urban and Regional Planning in the School of Architecture and Planning (SOAP) at the University of Witwatersrand. I am investigating the extent to which the people living in backyard houses use their backyard and household space.

I am inviting you to be part of the study through an interview process and drawing exercise.

The interview will take no longer than an hour of your time at your house. During the course of the interview you will be asked questions regarding how you use your backyard space and how does it change overtime, what are the kinds of activities do you partake in and what are the limitations you face regarding the use of space? With your permission the interview will be recorded using an audio recorder and hand written notes. Photographs may also be taken at your house with your consent.

You have been selected to participate in this study due to the fact that you reside in a backyard house in Bram Fischerville.

Your participation is voluntary, you may refuse to answer any questions that make you uncomfortable, and you may withdraw at any time. You will receive **no payment or other incentives for your participation.**

Your participation will be completely anonymous; your name and house address will not be included in the research and you will not be personally identified in the final report.

EXAMPLE: The results of the interview and your personal views will not be linked to you in the final report. *In the event that I use direct quotations from this interview, please note that your identity will not be revealed. Further, any information that you share will be kept confidential and can only be accessed by me on a password protected computer. There are also no foreseeable risks associated with your participation.*

The research undertaken is solely for academic purposes and once completed will be available electronically and can be accessed publicly.

If you have any questions, concerns, or comments or if you would like a copy of the final report, please feel free to contact me at 707743@students.wits.ac.za or my supervisor margot.rubin@wits.ac.za or 011 646 0257

Reitumetse Selepe
BSc Urban and Regional Planning (honours)

Interview Schedule.

The interview schedule will be used as a guideline to conduct a semi-structured interview. It will be accompanied by a drawing exercise with the participants in order to engage with them as well as to illustrate the internal and external spatial reconfiguration of the backyard houses. This drawing exercise will be done by both the participants and I, for example I would draw the outline of the house and they can fill in the drawing.

The schedule.

- How long have you been living in the backyard house and what are the reasons for staying here?
 - This can be related to location, affordability or the relationship with the landlord.
 - How did you find this place, did you come from another place outside Bram Fischerville?
 - Are there/has there been other people living in the same plot in a different backyard house?
 - Who came first?
 - Does having more people in the yard limit or affect the activities you can do?
- How much does it cost living here, how much rent do you need to pay?
- How many people live in the house with you?
- How much space do you have in the house; the furniture you are able to fit in the house?
 - How many rooms do you have?
 - How do you partition the house or what do you use to demarcate the different rooms?
 - Why is it important to partition the house?
- How do you use the different demarcated spaces?
 - Where do you sleep, watch television, bath, and cook?
 - Who uses the different spaces in the house?
- How does the use of space change throughout the day, what household needs drive the reconfiguration of the house?
- What happens outside the house, are the specific spaces that you use for certain activities?
 - If so, what are these activities?
 - Is there a reason for using the outside area rather than inside?
- What is the relationship between you and the landlord?
 - What spaces do you share?
 - What facilities do you share?

- How does sharing or lack of sharing any space or facility affect your activities throughout the day?
- Are there rules on how to partition and use the space?
- Who makes the rules on the use of space; internal and external spaces
- Are you able to accommodate visitors and family members who want to sleepover?
 - If not, how do you feel about it?
- How do you feel about the space which you have?
 - What limitations do you have (what you cannot do with the space you have)?
 - Are they affected by the size of the house, or size of the family, costs or furniture?
 - Are there any rules (maybe from the landlord) that limit you/the family in doing certain activities that you would like to do?